

THE UNIVERSITY OF CHICAGO

SCIENCE

ANNO

1880

PHYSICS

UNIVERSITY



A
NEW MAP
OF THE
SOIL
OF
FRANCE.

- Mountain
- various Loams
- Chalk
- Gravel
- Stony
- Rich Loam
- Heath

TRAVELS

During the Years 1787, 1788, & 1789;

UNDERTAKEN MORE PARTICULARLY WITH A VIEW OF ASCERTAINING

THE

CULTIVATION, WEALTH, RESOURCES,

AND

NATIONAL PROSPERITY

OF

THE KINGDOM OF FRANCE.

THE SECOND EDITION.

VOL. I.

By ARTHUR YOUNG, Esq. F.R.S.

SECRETARY TO THE BOARD OF AGRICULTURE; HONORARY MEMBER OF THE SOCIETIES OF DUBLIN, BATH, YORK, SALFORD, ODIHAM, AND KENT; THE PHILOSOPHICAL AND LITERARY SOCIETY OF MANCHESTER; THE VETERINARY COLLEGE OF LONDON; THE OECONOMICAL SOCIETY OF BERNE; THE PHYSICAL SOCIETY OF ZURICH; THE PALATINE ACADEMY OF AGRICULTURE AT MANHEIM; THE IMPERIAL OECONOMICAL SOCIETY ESTABLISHED AT PETERSBURGH; THE ROYAL AND ELECTORAL OECONOMICAL SOCIETY OF CELLE; ASSOCIATE OF THE ROYAL SOCIETY OF AGRICULTURE AT PARIS; AND CORRESPONDING MEMBER OF THE ROYAL ACADEMY OF AGRICULTURE AT FLORENCE; AND OF THE PATRIOTIC SOCIETY AT MILAN.

London :

PRINTED FOR W. RICHARDSON, ROYAL-EXCHANGE.

1794.

TRAVELS

TO THE MOUNTAINS OF THE NORTH, AND TO THE MOUNTAINS OF THE SOUTH, IN THE YEAR 1800.

CULTIVATION, WITH THE KNOWLEDGE

AND

NATIONAL PROSPERITY

THE KINGDOM OF FRANCE

THE SECOND EDITION

BY ALEXANDER JOHNSON, ESQ.

IN TWO VOLUMES. THE FIRST VOLUME CONTAINS A HISTORY OF THE
KINGDOM OF FRANCE, FROM THE BEGINNING OF THE SEVENTEENTH
CENTURY TO THE PRESENT TIME. THE SECOND VOLUME CONTAINS
A HISTORY OF THE KINGDOM OF FRANCE, FROM THE PRESENT TIME
TO THE PRESENT TIME. THE FIRST VOLUME CONTAINS A HISTORY
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SEVENTEENTH CENTURY TO THE PRESENT TIME. THE SECOND
VOLUME CONTAINS A HISTORY OF THE KINGDOM OF FRANCE, FROM
THE PRESENT TIME TO THE PRESENT TIME.

LONDON: PRINTED BY W. BARNARD, ST. MARTIN'S LANE, 1794.

P R E F A C E.

IT is a question whether modern history has any thing more curious to offer to the attention of the politician, than the progress and rivalship of the French and English empires, from the ministry of Colbert to the revolution in France. In the course of those 130 years, both have figured with a degree of splendour that has attracted the admiration of mankind.

In proportion to the power, the wealth, and the resources of these nations, is the interest which the world in general takes in the maxims of political œconomy by which they have been governed. To examine how far the system of that œconomy has influenced agriculture, manufactures, commerce, and public felicity, is certainly an inquiry of no slight importance; and so many books have been composed on the *theory* of these, that the public can hardly think that time misemployed which attempts to give **THE PRACTICE**.

The survey which I made, some years past, of the agriculture of England and Ireland (the minutes of which I published under the title of *Tours*), was such a step towards understanding the state of our husbandry as I shall not presume to characterise; there are but few of the European nations that do not read these *Tours* in their own language; and, notwithstanding all their faults and deficiencies, it has been often regretted, that no similar description of France could be resorted to either by the farmer or the politician. Indeed it could not but be lamented, that this vast kingdom, which has so much figured in history, were like to remain another century unknown, with respect to those circumstances that are the objects of my inquiries. An hundred and thirty years have passed, including one of the most active and conspicuous reigns upon record, in which the French power and resources, though much overstrained, were formidable to Europe. How far were that power and those resources founded on the permanent basis of an enlightened agriculture? How far on the more insecure support of manufactures and commerce? How far have wealth and power and exterior splendour, from whatever cause they may have arisen, reflected back upon the people the prosperity they implied? Very curious inquiries; yet resolved insufficiently by those whose political reveries are spun by their fancies, or caught flying as they are whirled through Europe in post-chaises. A man who is not practically acquainted with agriculture, knows not how to make

those inquiries ; he scarcely knows how to discriminate the circumstances productive of misery, from those which generate the felicity of a people ; an assertion that will not appear paradoxical, to those who have attended closely to these subjects. At the same time, the mere agriculturist, who makes such journies, sees little or nothing of the connection between the practice in the fields, and the resources of the empire ; of combinations that take place between operations apparently unimportant, and the general interest of the state ; combinations so curious, as to convert, in some cases, well cultivated fields into scenes of misery, and accuracy of husbandry into the parent of national weakness. These are subjects that never will be understood from the speculations of the mere farmer, or the mere politician ; they demand a mixture of both ; and the investigation of a mind free from prejudice, particularly national prejudice ; from the love of system, and of the vain theories that are to be found in the closets of speculators alone. God forbid that I should be guilty of the vanity of supposing myself thus endowed ! I know too well the contrary ; and have no other pretension to undertake so arduous a work, than that of having reported the agriculture of England with some little success. Twenty years experience, since that attempt, may make me hope to be not less qualified for similar exertions at present.

The clouds that for four or five years past, have indicated a change in the political sky of the French hemisphere, and which have since gathered to so singular a storm, have rendered it more interesting, to know what France was previously to any change. It would indeed have been matter of astonishment, if monarchy had risen, and had set in that region, without the kingdom having had any examination professedly agricultural.

The candid reader will not expect, from the registers of a traveller, that minute analysis of common practice, which a man is enabled to give, who resides some months, or years, confined to one spot ; twenty men, employed during twenty years, would not effect it ; and supposing it done, not one thousandth part of their labours would be worth a perusal. Some singularly enlightened districts merit such attention : but the number of them, in any country, is inconsiderable ; and the practices that deserve such a study, perhaps, still fewer : to know that unlightened practices exist, and want improvement, is the chief knowledge that is of use to convey ; and this rather for the statesman than the farmer. No reader, if he knows any thing of my situation, will expect, in this work, what the advantages of rank and fortune are necessary to produce—of such I had none to exert, and could combat difficulties with no other arms than unremitted attention, and unabating industry. Had my aims been seconded by that success in life, which gives energy to effort, and vigour to pursuit, the work would have been more worthy of the public eye ; but such success must, in this kingdom,

kingdom, be sooner looked for in any other path than that of the plough; the *non ullus aratro dignus honos*, was not more applicable to a period of confusion and bloodshed at Rome, than to one of peace and luxury in England.

One circumstance I may be allowed to mention, because it will shew, that whatever faults the ensuing pages contain, they do not flow from any presumptive expectation of success: a feeling that belongs to writers only, much more popular than myself: when the publisher agreed to run the hazard of printing these papers, and some progress being made in the journal, the whole MS. was put into the compositor's hand to be examined, if there were a sufficiency for a volume of sixty sheets; he found enough prepared for the press to fill 140: and I assure the reader, that the successive employment of striking out and mutilating more than the half of what I had written, was executed with more indifference than regret, even though it obliged me to exclude several chapters, upon which I had taken considerable pains. The publisher would have printed the whole; but whatever faults may be found with the author, he ought at least to be exempted from the imputation of an undue confidence in the public favour; since, to expunge was undertaken as readily as to compose.—So much depended in the second part of the work on accurate figures, that I did not care to trust to myself, but employed a schoolmaster, who has the reputation of being a good arithmetician, for examining the calculations, and I hope he has not let any material errors escape him.

The revolution in France was a hazardous and critical subject, but too important to be neglected; the details I have given, and the reflections I have ventured, will, I trust, be received with candour, by those who consider how many authors, of no inconsiderable ability and reputation, have failed on that difficult theme: the course I have steered is so removed from extremes, that I can hardly hope for the approbation of more than a few; and I may apply to myself, in this instance, the words of Swift:—"I have the ambition, common with other reasoners, to wish at least that both parties may think me *in the right*; but if that is not to be hoped for, my next wish should be, that both might think me *in the wrong*; which I would understand as an ample justification of myself, and a sure ground to believe that I have proceeded at least with impartiality, and perhaps with truth."

[The text in this block is extremely faint and illegible, appearing as a series of horizontal lines across the page.]

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12	0	10	6	53	2	6	4½	94	4	2	3	450	19	13	9	860	37	12	6
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16	0	14	0	57	2	9	10½	98	4	5	9	490	21	8	9	900	39	7	6
17	0	14	10½	58	2	10	9	99	4	6	7½	500	21	17	6	910	39	16	3
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19	0	16	7½	60	2	12	6	110	4	16	3	520	22	15	0	930	40	13	9
20	0	17	6	61	2	13	4½	120	5	5	0	530	23	3	9	940	41	2	6
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23	1	0	1½	64	2	16	0	150	6	11	3	560	24	10	0	970	42	8	9
24	1	1	0	65	2	16	10½	160	7	0	0	570	24	18	9	980	42	17	6
25	1	1	10½	66	2	17	9	170	7	8	9	580	25	7	6	990	43	6	3
26	1	2	9	67	2	18	7½	180	7	17	6	590	25	16	3	1000	43	15	0
27	1	3	7½	68	2	19	6	190	8	6	3	600	26	5	0	1100	48	2	6
28	1	4	6	69	3	0	4½	200	8	15	0	610	26	13	9	1200	52	10	0
29	1	5	4½	70	3	1	3	210	9	3	9	620	27	2	6	1300	56	17	6
30	1	6	3	71	3	2	1½	220	9	12	6	630	27	11	3	1400	61	5	0
31	1	7	1½	72	3	3	0	230	10	1	3	640	28	0	0	1500	65	12	6
32	1	8	0	73	3	3	10½	240	10	10	0	650	28	8	9	1600	70	0	0
33	1	8	10½	74	3	4	9	250	10	18	9	660	28	17	6	1700	74	7	6
34	1	9	9	75	3	5	7½	260	11	7	6	670	29	6	3	1800	78	15	0
35	1	10	7½	76	3	6	6	270	11	16	3	680	29	15	0	1900	83	2	6
36	1	11	6	77	3	7	4½	280	12	5	0	690	30	3	9	2000	87	10	0
37	1	12	4½	78	3	8	3	290	12	13	9	700	30	12	6	2100	91	17	6
38	1	13	3	79	3	9	1½	300	13	2	6	710	31	1	3	2200	96	5	0
39	1	14	1½	80	3	10	0	310	13	11	3	720	31	10	0	2300	100	12	6
40	1	15	0	81	3	10	10½	320	14	0	0	730	31	18	9	2400	105	0	0
41	1	15	10½	82	3	11	9	330	14	8	9	740	32	7	6	2500	109	7	6

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3500	153	2	6	200,000	8750	0	0	50,000,000	2,187,500
3600	157	10	0	300,000	13,125	0	0	60,000,000	2,625,000
3700	161	17	6	400,000	17,500	0	0	70,000,000	3,062,500
3800	166	5	0	500,000	21,875	0	0	80,000,000	3,500,000
3900	170	12	6	600,000	26,250	0	0	90,000,000	3,937,500
4000	175	0	0	700,000	30,625	0	0	100,000,000	4,375,000
4100	179	7	6	800,000	35,000	0	0	200,000,000	8,750,000
4200	183	15	0	900,000	39,375	0	0	300,000,000	13,125,000
4300	188	2	6	1,000,000	43,750	0	0	400,000,000	17,500,000
4400	192	10	0	2,000,000	87,500	0	0	500,000,000	21,875,000
4500	196	17	6	3,000,000	131,250	0	0	600,000,000	26,250,000
4600	201	5	0	4,000,000	175,000	0	0	700,000,000	30,625,000
4700	205	12	6	5,000,000	218,750	0	0	800,000,000	35,000,000
4800	210	0	0	6,000,000	262,500	0	0	900,000,000	39,375,000
4900	214	7	6	7,000,000	306,250	0	0	1000,000,000	43,750,000
5000	218	15	0	8,000,000	350,000	0	0	2000,000,000	87,500,000
6000	262	10	0	9,000,000	393,750	0	0	3000,000,000	131,250,000
7000	306	5	0	10,000,000	437,500	0	0	4000,000,000	175,000,000
8000	350	0	0	11,000,000	481,250	0	0	5000,000,000	218,750,000
9000	393	15	0	12,000,020	425,000	0	0	6000,000,000	262,500,000
10,000	437	10	0	13,000,000	568,750	0	0		





T R A V E L S, &c.

THERE are two methods of writing travels; to register the journey itself, or the result of it. In the former case, it is a diary, under which head are to be classed all those books of travels written in the form of letters. The latter usually falls into the shape of essays on distinct subjects. Of the former method of composing, almost every book of modern travels is an example. Of the latter, the admirable essays of my valuable friend Mr. Professor Symonds, upon Italian agriculture, are the most perfect specimens.

It is of very little importance what form is adopted by a man of real genius; he will make any form useful, and any information interesting. But for persons of more moderate talents, it is of consequence to consider the circumstances for and against both these modes.

The journal form hath the advantage of carrying with it a greater degree of credibility; and, of course, more weight. A traveller who thus registers his observations is detected the moment he writes of things he has not seen. He is precluded from giving studied or elaborate remarks upon insufficient foundations: If he sees little, he must register little: if he has few good opportunities of being well informed, the reader is enabled to observe it, and will be induced to give no more credit to his relations than the sources of them appear to deserve: if he passes so rapidly through a country as necessarily to be no judge of what he sees, the reader knows it: if he dwells long in places of little or no moment with private views or for private business, the circumstance is seen; and thus the reader has the satisfaction of being as safe from imposition either designed or involuntary, as the nature of the case will admit: all which advantages are wanted in the other method.

But to balance them, there are on the other hand some weighty inconveniences; among these the principal is, the prolixity to which a diary generally leads; the very mode of writing almost making it inevitable. It necessarily causes repetitions of the same subjects and the same ideas; and that surely must be deemed no inconsiderable fault, when one employs many words to say what might be better said in a few. Another capital objection is, that subjects of importance, instead of being treated *de suite* for illustration or comparison, are given by scraps as received, without order, and without connection; a mode which lessens the effect of writing, and destroys much of its utility.

In favour of composing essays on the principal objects that have been observed, that is, giving the result of travels and not the travels themselves, there is this obvious and great advantage, that the subjects thus treated are in as complete a state of combination and illustration as the abilities of the author can make them; the matter comes with full force and effect. Another admirable circumstance is brevity; for by the rejection of all useless details, the reader has nothing before him but what tends to the full explanation of the subject: of the disadvantages, I need not speak; they are sufficiently noted by shewing the benefits of the diary form; for proportionably to the benefits of the one, will clearly be the disadvantages of the other.

After weighing the *pour* and the *contre*, I think that it is not impracticable in my peculiar case to retain the benefits of both these plans.

With one leading and predominant object in view, namely agriculture, I have conceived that I might throw each subject of it into distinct chapters, retaining all the advantages which arise from composing the result only of my travels.

At the same time, that the reader may have whatever satisfaction flows from the diary form, the observations which I made upon the face of the countries through which I passed; and upon the manners, customs, amusements, towns, roads, seats, &c. may, without injury, be given in a journal, and thus satisfy the reader in all those points, with which he ought in candour to be made acquainted, for the reasons above intimated.

It is upon this idea that I have reviewed my notes, and executed the work I now offer to the public.

But travelling upon paper, as well as moving amongst rocks and rivers, hath its difficulties. When I had traced my plan, and begun to work upon it, I rejected, without mercy, a variety of little circumstances relating to myself only, and of conversations with various persons which I had thrown upon paper for the amusement of my family and intimate friends. For this I was remonstrated with by a person, of whose judgment I think highly, as having absolutely spoiled my diary, by expunging the very passages that would best please the mass of common readers; in a word, that I must give up the journal plan entirely, or let

let it go as it was written.—To treat the public like a friend, let them see all, and trust to their candour for forgiving trifles. He reasoned thus: *Depend on it, Young, that those notes you wrote at the moment, are more likely to please than what you will now produce coolly, with the idea of reputation in your head: whatever you strike out will be what is most interesting, for you will be guided by the importance of the subject; and believe me, it is not this consideration that pleases so much as a careless and easy mode of thinking and writing, which every man exercises most when he does not compose for the press. That I am right in this opinion you yourself afford a proof. Your tour of Ireland (he was pleased to say) is one of the best accounts of a country I have read, yet it had no great success. Why? Because the chief part of it is a farming diary, which, however valuable it may be to consult, nobody will read. If, therefore, you print your journal at all, print it so as to be read, or reject the method entirely, and confine yourself to set dissertations. Remember the travels of Dr. — and Mrs. —, from which it would be difficult to gather one single important idea, yet they were received with applause; nay, the bagatelles of Baretti, amongst the Spanish muleteers, were read with avidity.*

The high opinion I have of the judgment of my friend, induced me to follow his advice; in consequence of which, I venture to offer my itinerary to the public, just as it was written on the spot: requesting my reader, if much should be found of a trifling nature, to pardon it, from a reflection, that the chief object of my travels is to be found in another part of the work, to which he may at once have recourse, if he wish to attend only to subjects of a more important character.

JOURNAL.

MAY 15, 1787.

THE streight that separates England, so fortunately for her, from all the rest of the world, must be crossed many times before a traveller ceases to be surpris'd at the sudden and universal change that surrounds him on landing at Calais. The scene, the people, the language, every object is new; and in those circumstances in which there is most resemblance, a discriminating eye finds little difficulty in discovering marks of distinction.

The noble improvement of a salt marsh, worked by Mons. Mouron of this town, occasioned my acquaintance some time ago with that gentleman; and I

had found him too well informed, upon various important objects, not to renew it with pleasure. I spent an agreeable and instructive evening at his house.—165 miles.

The 17th. Nine hours rolling at anchor had so fatigued my mare, that I thought it necessary for her to rest one day; but this morning I left Calais. For a few miles the country resembles parts of Norfolk and Suffolk; gentle hills, with some inclosures around the houses in the vales, and a distant range of wood. The country is the same to Boulogne. Towards that town, I was pleased to find many seats belonging to people who reside there. How often are false ideas conceived from reading and report! I imagined that nobody but farmers and labourers in France lived in the country; and the first ride I take in that kingdom shews me many country seats. The road excellent.

Boulogne is not an ugly town; and from the ramparts of the upper part the view is beautiful, though low water in the river would not let me see it to advantage. It is well known that this place has long been the resort of great numbers of persons from England, whose misfortunes in trade, or extravagance in life, have made a residence abroad more agreeable than at home. It is easy to suppose that they here find a *level* of society that tempts them to herd in the same place. Certainly it is not cheapness, for it is rather dear. The mixture of French and English women makes an odd appearance in the streets; the latter are dressed in their own fashion; but the French heads are all without hats, with close caps, and the body covered with a long cloak that reaches to the feet. The town has the appearance of being flourishing: the buildings good, and in repair, with some modern ones; perhaps as sure a test of prosperity as any other. They are raising also a new church, on a large and expensive scale. The place on the whole is chearful, the environs pleasing, and the sea-shore is a flat strand of firm sand as far as the tide reaches. The high land adjoining is worth viewing by those who have not already seen the petrification of clay; it is found in the stoney and argillaceous state, just as I described at Harwich. (*Annals of Agriculture*, vol. vi. p. 218.)—24 miles.

The 18th. The view of Boulogne from the other side, at the distance of a mile is a pleasing landscape; the river meanders in the vale, and spreads in a fine reach under the town, just before it falls into the sea, which opens between two high lands, one of which backs the town.—The view wants only wood; for if the hills had more, fancy could scarcely paint a more agreeable scene. The country improves, more inclosed, and some parts strongly resembling England. Some fine meadows about Bonbrie, and several chateaus. I am not professedly in this diary on husbandry, but must just observe, that it is to the full as bad as the country is good; corn miserable and yellow with weeds, yet all summer fallowed with lost attention. On the hills, which are at no great distance from the sea, the trees
turn

turn their heads from it, shorn of their foliage: it is not therefore to the S. W. alone that we should attribute this effect.—If the French have not husbandry to shew us, they have roads; nothing can be more beautiful, or kept in more garden order, if I may use the expression, than that which passes through a fine wood of Mons. Neuillier's; and indeed for the whole way from Samer it is wonderfully formed: a vast causeway, with hills cut to level vales; which would fill me with admiration, if I had known nothing of the abominable *corvées*, that make me commiserate the oppressed farmers, from whose extorted labour this magnificence has been wrung. Women gathering grass and weeds by hand in the woods for their cows is a trait of poverty.

Pass *turberries*, near Montreuil, like those at Newbury. The walk round the ramparts of that town is pretty: the little gardens in the bastions below are singular. The place has many English; for what purpose not easy to conceive, for it is unenlivened by those circumstances that render towns pleasant. In a short conversation with an English family returning home, the lady, who is young, and I conjecture agreeable, assured me I should find the court of Versailles amazingly splendid. Oh! how she loved France!—and should regret going to England if she did not expect soon to return. As she had crossed the kingdom of France, I asked her what part of it pleased her best; the answer was, such as a pair of pretty lips would be sure to utter, “Oh! Paris and Versailles.” Her husband, who is not so young, said “Touraine.” It is probable, that a farmer is much more likely to agree with the sentiments of the husband than of the lady, notwithstanding her charms.—24 miles.

The 19th. Dined, or rather starved, at Bernay, where for the first time I met with that wine of whose ill fame I had heard so much in England, that of being worse than small beer. No scattered farm-houses in this part of Picardy, all being collected in villages, which is as unfortunate for the beauty of a country, as it is inconvenient to its cultivation. To Abbeville, unpleasant, nearly flat; and though there are many and great woods, yet they are uninteresting. Pass the new chalk chateau of Mons. St. Maritan, who, had he been in England, would not have built a good house in that situation, nor have projected his walls like those of an alms-house.

Abbeville is said to contain 22,000 souls; it is old, and disagreeably built; many of the houses of wood, with a greater air of antiquity than I remember to have seen; their brethren in England have been long ago demolished. Viewed the manufacture of Van Robais, which was established by Louis XIV. and of which Voltaire and others have spoken so much. I had many enquiries concerning wool and woollens to make here; and, in conversation with the manufacturers, found them great politicians, condemning with violence the new commercial treaty with England.—30 miles.

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The 21st. It is the same flat and unpleasing country to Flixcourt.—15 miles.

The 22d. Poverty and poor crops to Amiens; women are now ploughing with a pair of horses to sow barley. The difference of the customs of the two nations is in nothing more striking than in the labours of the sex; in England, it is very little that they will do in the fields except to glean and make hay; the first is a party of pilfering, and the second of pleasure: in France, they plough and fill the dung-cart. Lombardy poplars seem to have been introduced here about the same time as in England.

Picquigny has been the scene of a remarkable transaction, that does great honour to the tolerating spirit of the French nation. Monf. Colmar, a Jew, bought the seignory and estate, including the viscounty of Amiens, of the Duke of Chaulnes, by virtue of which he appoints the canons of the cathedral of Amiens. The bishop resisted his nomination, and it was carried by appeal to the parliament of Paris, whose decree was in favour of Monf. Colmar. The immediate seignory of Picquigny, but without its dependences, is resold to the Count d'Artois.

At Amiens, view the cathedral, said to be built by the English; it is very large, and beautifully light and decorated. They are fitting it up in black drapery, and a great canopy, with illuminations for the burial of the Prince de Tingry, colonel of the regiment of cavalry, whose station is here. To view this was an object among the people, and crowds were at each door. I was refused entrance, but some officers being admitted, gave orders that an English gentleman without should be let in, and I was called back from some distance and desired very politely to enter, as they did not know at first that I was an Englishman. These are but trifles, but they shew liberality; and it is fair to report them. If an Englishman receives attentions in France, *because he is an Englishman*, what return ought to be made to a Frenchman in England, is sufficiently obvious. The chateau d'eau, or machine for supplying Amiens with water, is worth viewing; but plates only could give an idea of it. The town abounds with woollen manufactures. I conversed with several masters, who united entirely with those of Abbeville in condemning the treaty of commerce.—15 miles.

The 23d. To Breteuil the country is diversified, woods every where in sight the whole journey.—21 miles.

The 24th. A flat and uninteresting chalky country continues almost to Clermont; where it improves; is hilly and has wood. The view of the town, as soon as the dale is seen, with the Duke of Fitzjames's plantations, is pretty.—24 miles.

The 25th. The environs of Clermont are picturesque. The hills about Liancourt are pretty; and spread with a sort of cultivation I had never seen before,

fore, a mixture of vineyard (for here the vines first appear); garden, and corn. A piece of wheat; a scrap of lucerne; a patch of clover or vetches; a bit of vines; with cherry, and other fruit-trees scattered among all, and the whole cultivated with the spade: it makes a pretty appearance, but must form a poor system of trifling.

Chantilly!—magnificence is its reigning character; it is never lost. There is not taste or beauty enough to soften it into milder features: all but the chateau is great; and there is something imposing in that; except the gallery of the Great Condé's battle, and the cabinet of natural history which is rich in very fine specimens, most advantageously arranged, it contains nothing that demands particular notice; nor is there one room which in England would be called large. The stable is truly great, and exceeds very much indeed any thing of the kind I had ever seen. It is 580 feet long, and 40 broad, and is sometimes filled with 240 English horses. I had been so accustomed to the imitation in water, of the waving and irregular lines of nature, that I came to Chantilly prepossessed against the idea of a canal; but the view of one here is striking, and had the effect which magnificent scenes impress. It arises from extent, and from the right lines of the water uniting with the regularity of the objects in view. It is Lord Kaimes, I think, who says, that the part of the garden contiguous to the house should partake of the regularity of the building; with much magnificence about a place, this is almost unavoidable. The effect here, however, is lessened by the parterre before the castle, in which the divisions and the diminutive jets-d'eau are not of a size to correspond with the magnificence of the canal. The menagerie is very pretty, and exhibits a prodigious variety of domestic poultry, from all parts of the world; one of the best objects to which a menagerie can be applied; these, and the Corsican stag, had all my attention. The *hameau* contains an imitation of an English garden; the taste is but just introduced into France, so that it will not stand a critical examination. The most English idea I saw is the lawn in front of the stables; it is large, of a good verdure, and well kept; proving clearly that they may have as fine lawns in the north of France as in England. The labyrinth is the only complete one I have seen, and I have no inclination to see another: it is in gardening what a rebus is in poetry. In the Sylvae are many very fine and scarce plants. I wish those persons who view Chantilly, and are fond of fine trees, would not forget to ask for the great beech; this is the finest I ever saw; straight as an arrow, and, as I guess, not less than 80 or 90 feet high; 40 feet to the first branch, and 12 feet diameter at five from the ground. It is in all respects one of the finest trees that can any where be met with. Two others are near it, but not equal to this superb one. The forest around Chantilly, belonging to the Prince of Condé, is immense, spreading far and wide; the Paris road crosses it for ten miles,

miles, which is its least extent. They say the capitainerie, or paramountship, is above 100 miles in circumference. That is to say, all the inhabitants for that extent are pestered with game, without permission to destroy it, in order to give one man diversion. Ought not these capitaineries to be extirpated?

At Luzarch, I found that my *mère*, from illness, would travel no further; French stables, which are covered dung-hills, and the carelessness of *garçons d'écuries*, an execrable set of vermin, had given her cold. I therefore left her to fend for from Paris, and went thither post; by which experiment I found that posting in France is much worse, and even, upon the whole, dearer than in England. Being in a post-chaife I travelled to Paris, as other travellers in post-chaïses do, that is to say, knowing little or nothing. The last ten miles I was eagerly on the watch for that throng of carriages which near London impede the traveller. I watched in vain; for the road, quite to the gates, is, on comparison, a perfect desert. So many great roads join here, that I suppose this must be accidental. The entrance has nothing magnificent; ill built and dirty. To get to the Rue de Varenne Fauxbourg St. Germain, I had the whole city to cross, and passed it by narrow, ugly, and crowded streets.

At the hotel de la Rochefoucauld I found the Duke of Liancourt and his sons, the Count de la Rochefoucauld, and the Count Alexander, with my excellent friend Monsieur de Lazowski, all of whom I had the pleasure of knowing in Suffolk. They introduced me to the Duchess D'Estissac, mother of the Duke of Liancourt, and to the Duchess of Liancourt. The agreeable reception and friendly attentions I met with from all this liberal family were well calculated to give me the most favourable impression. * * * * *.——42 miles.

The 26th. So short a time had I passed before in France, that the scene is totally new to me. Till we have been accustomed to travelling, we have a propensity to stare at and admire every thing—and to be on the search for novelty, even in circumstances in which it is ridiculous to look for it. I have been upon the full silly gape to find out things that I had not found before, as if a street in Paris could be composed of any thing but houses, or houses formed of any thing but brick or stone—or that the people in them, not being English, would be walking on their heads. I shall shake off this folly as fast as I can, and bend my attention to mark the character and disposition of the nation. Such views naturally lead us to catch the little circumstances which sometimes express them; not an easy task, but subject to many errors.

I have only one day to pass at Paris, and that is taken up with buying necessities. At Calais my abundant care produced the inconvenience it was meant to avoid; I was afraid of losing my trunk, by leaving it at Dessen's for the diligence; so I sent it to M. Mouron's.—The consequence is, that it is not to be found at Paris, and its contents are to be bought again before I can leave this city

city on our journey to the Pyrenees. I believe it may be received as a maxim, that a traveller should always trust his baggage to the common voitures of the country, without any extraordinary precautions.

After a rapid excursion, with my friend Lazowski, to see many things, but too hastily to form any correct idea, spent the evening at his brother's, where I had the pleasure of meeting Monf. de Brouffonet, secretary of the Royal Society of Agriculture, and Monf. Desmarets, both of the Academy of Sciences. As Monf. Lazowski is well informed in the manufactures of France, in the police of which he enjoys a post of consideration, and as the other gentlemen have paid much attention to agriculture, the conversation was in no slight degree instructive, and I regretted that a very early departure from Paris would not let me promise myself a further enjoyment so congenial with my feelings, as the company of men, whose conversation shewed a marked attention to objects of national importance. On the breaking up of the party, went with Count Alexander de la Rochefoucauld post to Versailles, to be present at the fête of the day following (Whitsunday) slept at the Duke de Liancourt's hotel.

The 27th. Breakfasted with him at his apartments in the palace, which are annexed to his office of grand master of the wardrobe, one of the principal in the court of France.—Here I found the duke surrounded by a circle of noblemen, among whom was the Duke de la Rochefoucauld, well known for his attention to natural history; I was introduced to him, as he is going to Bagnere de Luchon in the Pyrenees, where I am to have the honour of being in his party.

The ceremony of the day was, the King's investing the Duke of Berri, son of the Count D'Artois, with the *cordons blue*. The Queen's band was in the chapel where the ceremony was performed, but the musical effect was thin and weak. During the service the King was seated between his two brothers, and seemed by his carriage and inattention to wish himself a hunting. He would certainly have been as well employed, as in hearing afterwards from his throne a feudal oath of chivalry, I suppose, or some such nonsense, administered to a boy of ten years old. Seeing so much pompous folly I imagined it was the dauphin, and asked a lady of fashion near me; at which she laughed in my face, as if I had been guilty of the most egregious idiotism: nothing could be done in a worse manner; for the stifling of her expression only marked it the more. I applied to Monf. de la Rochefoucauld to learn what gross absurdity I had been guilty of so unwittingly; when, forsooth, it was because the dauphin, *as all the world knows in France*, has the *cordons blue* put around him as soon as he is born. So unpardonable was it for a foreigner to be ignorant of such an important part of French history, as that of giving a babe a blue slobbering bib instead of a white one!

After this ceremony was finished, the King and the knights walked in a sort of procession to a small apartment in which he dined, saluting the Queen as they passed. There appeared to be more ease and familiarity than form in this part of the ceremony; her majesty, who, by the way, is the most beautiful woman I saw to-day, received them with a variety of expression. On some she smiled; to others she talked; a few seemed to have the honour of being more in her intimacy. Her return to some was formal, and to others distant. To the gallant Suffrein it was respectful and benign. The ceremony of the King's dining in public is more odd than splendid. The Queen sat by him with a cover before her, but ate nothing; conversing with the Duke of Orleans, and the Duke of Liancourt, who stood behind her chair. To me it would have been a most uncomfortable meal, and were I a sovereign, I would sweep away three-fourths of these stupid forms; if Kings do not dine like other people, they lose much of the pleasure of life; their station is very well calculated to deprive them of much, and they submit to nonsensical customs, the sole tendency of which is to lessen the remainder. The only comfortable or amusing dinner is a table of ten or twelve covers for the people whom they like; travellers tell us that this was the mode of the late King of Prussia, who knew the value of life too well to sacrifice it to empty forms on the one hand, or to a monastic reserve on the other.

The palace of Versailles, one of the objects of which report had given me the greatest expectation, is not in the least striking: I view it without emotion: the impression it makes is nothing. What can compensate the want of unity? From whatever point viewed, it appears an assemblage of buildings; a splendid quarter of a town, but not a fine edifice; an objection from which the garden front is not free, though by far the most beautiful.—The great gallery is the finest room I have seen; the other apartments are nothing; but the pictures and statues are well known to be a capital collection. The whole palace, except the chapel, seems to be open to all the world; we pushed through an amazing croud of all sorts of people to see the procession, many of them not very well dressed, whence it appears, that no questions are asked. But the officers at the door of the apartment in which the King dined, made a distinction, and would not permit all to enter promiscuously.

Travellers speak much, even very late ones, of the remarkable interest the French take in all that personally concerns their King, shewing by the eagerness of their attention not curiosity only, but love. Where, how, and in whom those gentlemen discovered this I know not.—It is either misrepresentation, or the people are changed in a few years more than is credible. Dine at Paris, and in the evening the Duchess of Liancourt, who seems to be one of the best of women, carried me to the opera at St. Cloud, where also we viewed the palace
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which the Queen is building; it is large, but there is much in the front that does not please me.—20 miles.

The 28th. Finding my mare sufficiently recovered for a journey, a point of importance to a traveller so weak in cavalry as myself, I left Paris, accompanying the Count de la Rochefoucauld and my friend Lazowski, and commencing a journey that is to cross the whole kingdom to the Pyrenees. The road to Orleans is one of the greatest that leads from Paris; I expected, therefore, to have my former impression of the little traffic near that city removed; but on the contrary it was confirmed; it is a desert compared with those around London. In ten miles we met not one stage or diligence; only two messageries, and very few chaises; not a tenth of what would have been met had we been leaving London at the same hour. Knowing how great, rich, and important a city Paris is, this circumstance perplexes me much. Should it afterwards be confirmed, conclusions in abundance are to be drawn.

For a few miles, the scene is every where scattered with the shafts of quarries, the stone drawn up by lanthorn wheels of a great diameter. The country diversified; and its greatest want to please the eye is a river; woods generally in view; the proportion of the French territory covered by this production for want of coals, must be prodigious, for it has been the same all the way from Calais. At Arpajon, the Maréchal Duke de Mouchy has a small house, which has nothing to recommend it.—20 miles.

The 29th. To Estamps is partly through a flat country, the beginning of the famous Pays de Beauce. To Toury, flat and disagreeable, only two or three gentlemen's seats in sight.—31 miles.

The 30th. One universal flat, uninclosed, uninteresting, and even tedious, though small towns and villages are every where in sight; the features that might compound a landscape are not brought together. This Pays de Beauce contains, by reputation, the cream of French husbandry; the soil excellent; but the management all fallow. Pass through part of the forest of Orleans belonging to the duke of that name; it is one of the largest in France.

From the steeple of the cathedral at Orleans, the prospect is very fine. The town large, and its suburbs, of single streets, extend near a league. The vast range of country, that spreads on every side, is an unbounded plain, through which the magnificent Loire bends his stately way, in sight for 14 leagues; the whole scattered with rich meadows, vineyards, gardens, and forests. The population must be very great; for, beside the city, which contains near 40,000 people, the number of smaller towns and villages strewed thickly over the plain is such as to render the whole scene animated. The cathedral, from which we had this noble prospect, is a fine building, the choir raised by Henry IV. The

new church is a pleasing edifice; the bridge a noble structure of stone, and the first experiment of the flat arch made in France, where it is now so fashionable. It contains nine, and is 410 feet long, and 45 wide. To hear some Englishmen talk, one would suppose there was not a fine bridge in all France; not the first, nor the last error I hope that travelling will remove. There are many barges and boats at the quay, built upon the river in the Bourbonnois, &c. loaded with wood, brandy, wine, and other goods; on arriving at Nantes, the vessels are broken up and sold with the cargo. Great numbers built with spruce fir. A boat goes from hence to that city, when demanded by six passengers, each paying a louis-d'or: they lie on shore every night, and reach Nantes in four days and an half. The principal street leading to the bridge is a fine one all busy and alive, for trade is brisk here. Admire the fine acacias scattered about the town.—20 miles.

The 31st. On leaving it, enter soon the miserable province of Sologne, which the French writers call the *triste* Sologne. Through all this country they have had severe spring frosts, for the leaves of the walnuts are black and cut off. I should not have expected this unequivocal mark of a bad climate after passing the Loire. To La Ferté Lowendahl, a dead flat of hungry sandy gravel, with much heath. The poor people, who cultivate the soil here, are *metayers*, that is, men who hire the land without ability to stock it; the proprietor is forced to provide cattle and feed, and he and his tenant divide the produce; a miserable system, that perpetuates poverty and excludes instruction. At La Ferté is a handsome chateau of the Marquis de Coix, with several canals, and a great command of water. To Nonant-le-Fuzelier, a strange mixture of sand and water. Much inclosed, and the houses and cottages of wood filled between the studs with clay or bricks, and covered not with slate but tile, with some barns boarded like those in Suffolk—rows of pollards in some of the hedges; an excellent road of sand; the general features of a woodland country; all combined to give a strong resemblance to many parts of England; but the husbandry is so little like that of England, that the least attention to it destroyed every notion of similarity.—27 miles.

JUNE 1. The same wretched country continues to La Loge; the fields are scenes of pitiable management, as the houses are of misery. Yet all this country highly improveable, if they knew what to do with it: the property, perhaps, of some of those glittering beings, who figured in the procession the other day at Versailles. Heaven grant me patience while I see a country thus neglected—and forgive me the oaths I swear at the absence and ignorance of the possessors.—Enter the generality of Bourges, and soon after a forest of oak belonging to the Count d'Artois; the trees are dying at top, before they attain any size. There
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the miserable Sologne ends; the first view of Verson and its vicinity is fine. A noble vale spreads at your feet, through which the river Cheere leads, seen in several places to the distance of some leagues, a bright sun burnished the water, like a string of lakes amidst the shade of a vast woodland. See Bourges to the left.—18 miles.

The 2d. Pass the rivers Cheere and Lave; the bridges well built; the stream fine, and with the wood, buildings, boats, and adjoining hills, form an animated scene. Several new houses, and buildings of good stone in Verson; the place appears thriving, and doubtless owes much to the navigation. We are now in Berri, a province governed by a provincial assembly, consequently the roads good, and made without *corvées*. Vatan is a little town that subsists chiefly by spinning. We drank there excellent Sancerre wine, of a deep colour, rich flavour, and good body, 20 *s.* the bottle; but in the country 10. An extensive prospect before we arrived at Chateauroux where we viewed the manufactures.—40 miles.

The 3d. Within about three miles of Argenton come upon a fine scene, beautiful, yet with bold features; a narrow vale bounded on every side with hills, covered with wood, all of which are immediately under the eye, without a level acre, except the bottom of the vale, through which a river flows, by an old castle picturesquely situated to the right; and to the left, a tower rising out of a wood.

At Argenton, walk up a rock that hangs almost over the town. It is a delicious scene. A natural ledge of perpendicular rock pushes forward abruptly over the vale, which is half a mile broad, and two or three long: at one end closed by hills, and at the other filled by the town with vineyards rising above it; the surrounding scene that hems in the vale is high enough for relief; vineyards, rocks or hills covered with wood. The vale cut into inclosures of a lovely verdure, and a fine river winds through it, with an outline that leaves nothing to wish. The venerable fragments of a castle's ruins, near the point of view, are well adapted to awaken reflections on the triumph of the arts of peace over the barbarous ravages of the feudal ages, when every class of society was involved in commotion, and the lower ranks were worse slaves than at present.

The general face of the country, from Verson to Argenton, is an uninteresting flat with many heaths of ling. No appearance of population, and even towns are thin. The husbandry poor and the people miserable. By the circumstances to which I could give attention I conceive them to be honest and industrious; they seem clean; are civil, and have good countenances. They appear to me as if they would improve their country, if they formed the part of a system, the principles of which tended to national prosperity.—18 miles.

The 4th. Pass an inclosed country, which would have a better appearance if the oaks had not lost their foliage by insects, whose webs hang over the buds.

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They are but now coming into leaf again. Cross a stream which separates Berri from La Marche; chefnuts appear at the same time; they are spread over all the fields, and yield the food of the poor. A variety of hill and dale, with fine woods, but little signs of population. Lizards for the first time also. There seems a connection relative to climate between the chefnuts and these harmless animals. They are very numerous, and some of them near a foot long. Sleep at La Ville au Brun.—24 miles.

The 5th. The country improves in beauty greatly; pass a vale, where a causeway stops the water of a small rivulet and swells it into a lake, that forms one feature of a delicious scene. The indented outlines and the swells margined with wood are beautiful; the hills on every side in unison; one now covered with ling the prophetic eye of taste may imagine lawn. Nothing is wanted to render the scene a garden, but to clear away rubbish.

The general face of the country, for 16 miles, by far the most beautiful I have seen in France; it is thickly inclosed, and full of wood; the umbrageous foliage of the chefnuts gives the same beautiful verdure to the hills, as watered meadows (seen for the first time to-day) to the vales. Distant mountainous ridges form the back ground, and make the whole interesting. The declivity of country, as we go down to Bassies, offers a beautiful view; and the approach to the town presents a landscape fancifully grouped of rock, and wood, and water. To Limoge, pass another artificial lake between cultivated hills; beyond are wilder heights, but mixed with pleasant vales; still another lake more beautiful than the former, with a fine accompaniment of wood; across a mountain of chefnut copse, which commands a scene of a character different from any I have viewed either in France or England, a great range of hill and dale all covered with forest, and bounded by distant mountains. Not a vestige of any human residence; no village; no house or hut, no smoke to raise the idea of a peopled country; an American scene; wild enough for the tomohawk of the savage. Stop at an execrable auberge, called Maison Rouge, where we intended to sleep; but, on examination, found every appearance so forbidding, and so beggarly an account of a larder, that we passed on to Limoge. The roads through all this country are truly noble, far beyond any thing I have seen in France or elsewhere.—44 miles.

The 6th. View Limoge, and examine its manufactures. It was certainly a Roman station, and some traces of its antiquity are still remaining. It is ill built, with narrow and crooked streets, the houses high and disagreeable. They are raised of granite, or wood with lath and plaister, which saves lime, an expensive article here, being brought from a distance of twelve leagues; the roofs are of pantiles, with projecting eaves, and almost flat; a sure proof we have quitted the region of heavy snows. The best of their public works is a noble fountain,
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The water conducted three quarters of a league by an arched aqueduct, brought under the bed of a rock 60 feet deep to the highest spot in the town, where it falls into a basin 15 feet diameter, cut out of one piece of granite; thence the water is let into reservoirs, closed by sluices, which are opened for watering the streets, or in case of fires.

The cathedral is ancient, and the roof of stone; there are some arabesque ornaments cut in stone, as light, airy, and elegant as any modern house can boast, whose decorations are in the same taste.

The present bishop has erected a large and handsome palace, and his garden is the finest object to be seen at Limoge, for it commands a landscape hardly to be equalled for beauty: it would be idle to give any other description than just enough to induce travellers to view it. A river winds through a vale, surrounded by hills that present the gayest and most animated assemblage of villas, farms, vines, hanging meadows, and chestnuts blended so fortunately as to compose a scene truly smiling. This bishop is a friend of the Count de la Rochefoucauld's family; he invited us to dine, and gave us a very handsome entertainment. Lord Macartney, when a prisoner in France, after the Grenades were taken, spent some time with him; there was an instance of French politeness shewn to his lordship, that marks the urbanity of this people. The order came from court to sing Te Deum on the very day that Lord Macartney was to arrive. Conceiving that the public demonstrations of joy for a victory that brought his noble guest a prisoner, might be personally unpleasant to him, the bishop proposed to the intendant to postpone the ceremony for a few days, in order that he might not meet it so abruptly; this was instantly acceded to, and conducted in such a manner afterwards as to mark as much attention to Lord Macartney's feelings as to their own. The bishop told me, that Lord Macartney spoke French better than he could have conceived possible for a foreigner, had he not heard him; better than many well educated Frenchmen.

The post of intendant here was rendered celebrated by being filled by that friend of mankind, Turgot, whose well earned reputation in this province placed him at the head of the French finances, as may be very agreeably learned, in that production of equal truth and elegance, his life by the Marquis of Condorcet. The character which Turgot left here is considerable. The noble roads we have passed, so much exceeding any other I have seen in France, were amongst his good works; an epithet due to them because not made by *corvées*. There is here a society of agriculture, which owes its origin to the same distinguished patriot: but in that most unlucky path of French exertion he was able to do nothing: evils too radically fixed were in the way of the attempt. This society does like other societies,—they meet, converse, offer premiums, and publish nonsense. This is not of much consequence, for the people, instead

stead of reading their memoirs, are not able to read at all. They can however *see*; and if a farm was established in that good cultivation which they ought to copy, something would be presented from which they *might* learn. I asked particularly if the members of this society had land in their own hands, from which it might be judged if they knew any thing of the matter themselves: I was assured that they had; but the conversation presently explained it: they had *metayers* around their country-seats, and this was considered as farming their own lands, so that they assume something of a merit from the identical circumstance, which is the curse and ruin of the whole country. In the agricultural conversations we have had on the journey from Orleans, I have not found one person who seemed sensible of the mischief of this system.

The 7th. No chesnuts for a league before we reach Piere Buffiere, they say because the basis of the country is a hard granite; and they assert also at Limoge, that in this granite there grow neither vines, wheat, nor chesnuts, but that on the softer granites these plants thrive well: it is true, that chesnuts and this granite appeared together when we entered Limosin. The road has been incomparably fine, and much more like the well kept alleys of a garden than a common high way. See for the first time old towers, that appear numerous in this country.—33 miles.

The 8th. Pass an extraordinary spectacle for English eyes, of many houses too good to be called cottages, without any glass windows. Some miles to the right is Pompadour, where the King has a stud; there are all kinds of horses, but chiefly Arabian, Turkish, and English. Three years ago four Arabians were imported, which had been procured at the expence of 72,000 livres (3149l.) the price of covering a mare is only three livres to the groom; the owners are permitted to sell their colts as they please, but if these come up to the standard height, the King's officers have the preference, provided they give the price offered by others. These horses are not saddled till six years old. They pasture all day, but at night are confined on account of wolves, which are so common as to be a great plague to the people. A horse of six years old, a little more than four feet six inches high, is sold for 70l.; and 15l. has been offered for a colt of one year old. Pass Uzarch; dine at Douzenac; between which place and Brive meet the first maiz, or Indian corn.

The beauty of the country, through the 34 miles from St. George to Brive, is so various, and in every respect so striking and interesting, that I shall attempt no particular description, but observe in general, that I am much in doubt, whether there be any thing comparable to it either in England or Ireland. It is not that a fine view breaks now and then upon the eye to compensate the traveller for the dulness of a much longer district; but a quick succession of landscapes, many of which would be rendered famous in England, by the resort of
travellers

travellers to view them. The country is all hill or valley; the hills are very high, and would be called with us mountains, if waste and covered with heath; but being cultivated to the very tops, their magnitude is lessened to the eye. Their forms are various: they swell in beautiful semi-globes; they project in abrupt masses, which inclose deep glens: they expand into amphitheatres of cultivation that rise in gradation to the eye: in some places tossed into a thousand inequalities of surface; in others the eye reposes on scenes of the softest verdure. Add to this the rich robe, with which nature's bounteous hand has dressed the slopes, with hanging woods of chefnut. And whether the vales open their verdant bosoms, and admit the sun to illumine the rivers in their comparative repose; or whether they be closed in deep glens, that afford a passage with difficulty to the water rolling over their rocky beds, and dazzling the eye with the lustre of cascades; in every case the features are interesting and characteristic of the scenery. Some views of singular beauty rivetted us to the spots; that of the town of Uzarch, covering a conical hill, rising in the hollow of an amphitheatre of wood, and surrounded at its feet by a noble river, is unique. Derry in Ireland has something of its form, but wants some of its richest features. The water-scenes from the town itself, and immediately after passing it, are delicious. The immense view from the descent to Douzenach is equally magnificent. To all this is added the finest road in the world, every where formed in the perfect manner, and kept in the highest preservation, like the well ordered alley of a garden, without dust, sand, stones, or inequality, firm and level, of pounded granite, and traced with such a perpetual command of prospect, that had the engineer no other object in view, he could not have executed it with a more finished taste.

The view of Brive, from the hill, is so fine, that it gives the expectation of a beautiful little town, and the gaiety of the environs encourages the idea; but, on entering, such a contrast is found as disgusts completely. Close, ill built, crooked, dirty, stinking streets, exclude the sun, and almost the air, from every habitation, except a few tolerable ones on the promenade.—34 miles.

The 9th. Enter a different country, with the new province of Quercy, which is a part of Guienne; not near so beautiful as Limosin, but, to make amends, it is far better cultivated. Thanks to maiz, which does wonders! Pass Noailles, on the summit of a high hill, the chateau of the Marshal Duke of that name.—Enter a calcareous country, and lose chefnuts at the same time.

In going down to Souillac, there is a prospect that must universally please: it is a bird's-eye view of a delicious little valley, sunk deep amongst some very bold hills that inclose it; a margin of wild mountain contrasts the extreme beauty of the level surface below, a scene of cultivation scattered with fine walnut trees; nothing can apparently exceed the exuberant fertility of this spot.

Souillac is a little town in a thriving state, having some rich merchants. They receive staves from the mountains of Auvergne by their river Dordonne, which is navigable eight months in the year; these they export to Bourdeaux and Libourn; also wine, corn, and cattle, and import salt in great quantities. It is not in the power of an English imagination to figure the animals that waited upon us here, at the Chapeau Rouge. Some things that called themselves by the courtesy of Souillac women, but in reality walking dung-hills.—But a neatly dressed clean waiting girl at an inn will be looked for in vain in France.—34 miles.

The 10th. Cross the Dordonne by a ferry; the boat well contrived for driving in at one end and out at the other, without the abominable operation, common in England, of beating horses till they leap into them; the price is as great a contrast as the excellence; we paid for an English whisky, a French cabriolet, one saddle-horse, and six persons, no more than 50s. (2s. 1d.) I have paid half-a-crown a wheel in England for execrable ferries, passed over at the hazard of the horses limbs.—This river runs in a very deep valley between two ridges of high hills: extensive views, all scattered with villages and single houses; an appearance of great population. Chestnuts on a calcareous soil, contrary to the Limosin maxim.

Pass Peyrac, and meet many beggars, which we had not done before. All the country, girls and women, are without shoes or stockings; and the ploughmen at their work have neither sabots nor feet to their stockings. This is a poverty, that strikes at the root of national prosperity; a large consumption among the poor being of more consequence than among the rich: the wealth of a nation lies in its circulation and consumption; and the case of poor people abstaining from the use of manufactures of leather and wool ought to be considered as an evil of the first magnitude. It reminded me of the misery of Ireland. Pass Pont-de-Rodez, and come to high land, whence an immense and singular prospect of ridges, hills, vales, and gentle slopes, rising one beyond another in every direction, with few masses of wood, but many scattered trees. At least forty miles are tolerably distinct to the eye, and without a level acre; the sun, on the point of setting, illumined part of it, and displayed a vast number of villages and scattered farms. The mountains of Auvergne, at the distance of 100 miles, added to the view. Pass by several cottages, exceedingly well built, of stone and slate or tiles, yet without any glass to the windows; can a country be likely to thrive where the great object is to spare manufactures? Women picking weeds into their aprons for their cows, another sign of poverty I observed, during the whole way from Calais.—30 miles.

The 11th. See for the first time the Pyrenees, at the distance of 150 miles.—To me, who had never seen an object farther than 60 or 70, I mean the Wicklow

low mountains, as I was going out of Holyhead, this was interesting. Wherever the eye wandered in search of new objects it was sure to rest there. Their magnitude, their snowy height, the line of separation between two great kingdoms, and the end of our travels altogether account for this effect. Towards Cahors the country changes, and has something of a savage aspect; yet houses are seen every where, and one-third of it under vines.

That town is bad; the streets neither wide nor strait, but the new road is an improvement. The chief objects of its trade and resource are vines and brandies. The true Vin de Cahors, which has a great reputation, is the produce of a range of vineyards, very rocky, on a ridge of hills full to the south, and is called Vin de Grave, because growing on a gravelly soil. In plentiful years, the price of good wine here does not exceed that of the cask; last year it was sold at 10s. 6d. a barrique, or 8d. a dozen. We drank it at the Trois Rois from three to ten years old, the latter at 30s. (1s. 3d.) the bottle; both excellent, full bodied, great spirit, without being fiery, and to my palate much better than our ports. I liked it so well, that I established a correspondence with Monf. Andoury, the innkeeper*. The heat of this country is equal to the production of strong wine. This was the most burning day we had experienced.

On leaving Cahors, the mountain of rock rises so immediately, that it seems as if it would tumble into the town. The leaves of walnuts are now black with frosts that happened within a fortnight. On enquiry, I found they are subject to these frosts all through the spring months; and though rye is sometimes killed by them, the mildew in wheat is hardly known;—a fact sufficiently destructive of the theory of frosts being the cause of that distemper. It is very rare that any snow falls here. Sleep at Ventillac.—22 miles.

The 12th. The shape and colour of the peasants houses here add a beauty to the country; they are square, white, and with rather flat roofs, but few windows. The peasants are for the most part land-proprietors. Immense view of the Pyrenees before us, of an extent and height truly sublime: near Perges, a rich vale, that seems to reach uninterruptedly to those mountains, is a glorious scenery; one vast sheet of cultivation; every where chequered with these well built white houses;—the eye losing itself in the vapour, which ends only with that stupendous ridge, whose snow-capped heads are broken into the boldest outline. The road to Caussade leads through a very fine avenue of six rows of trees, two of them mulberries, which are the first we have seen. Thus we have travelled almost to the Pyrenees before we met with an article of culture which some want to introduce into England. The vale here is all on a dead level; the road finely made, and mended with gravel. Montauban is old, but

* I since had a barrique of him; but whether he sent bad wine, which I am not willing to believe, or that it came through bad hands, I know not. It is however so bad, as to be item for folly.

not ill built. There are many good houses, without forming handsome streets. It is said to be very populous, and the eye confirms the intelligence. The cathedral is modern, and pretty well built, but too heavy. The public college, the seminary, the bishop's palace, and the house of the first president of the court of aids are good buildings; the last large, with a most shewy entrance. The promenade is finely situated; built on the highest part of the rampart, and commanding that noble vale, or rather plain, one of the richest in Europe, which extends on one side to the sea, and in front to the Pyrenees; whose towering masses, heaped one upon another, in a stupendous manner, and covered with snow, offer a variety of lights and shades from indented forms, and the immensity of their projections. This prospect, which contains a semi-circle of an hundred miles diameter, has an oceanic vastness, in which the eye loses itself; an almost boundless scene of cultivation; an animated, but confused mass of infinitely varied parts—melting gradually into the distant obscure, from which emerges the amazing frame of the Pyrenees, rearing their silvered heads far above the clouds. At Montauban, I met Capt. Plampin, of the royal navy; he was with Major Crew, who has a house and family here, to which he politely carried us; it is sweetly situated on the skirts of the town, commanding a fine view; they were so obliging as to resolve my enquiries upon some points, of which a residence made them complete judges. Living is reckoned cheap here; a family was named to us, whose income was supposed to be about 1500 louis a-year, and who lived as handsomely as in England on 5000l. The comparative dearth and cheapness of different countries is a subject of considerable importance, but difficult to analyze. As I conceive the English to have made far greater advances in the useful arts, and in manufactures, than the French have done, England ought to be the cheaper country. What we meet with in France, is a cheap *mode of living*, which is quite another consideration.—30 miles.

The 13th. Pass Grisolles, where are well built cottages without glass, and some with no other light than the door. Dine at Pompion, at the Grand Soleil, an uncommonly good inn, where Capt. Plampin, who accompanied us thus far, took his leave. Here we had a violent storm of thunder and lightning, with rain much heavier I thought than I had known in England; but, when we set out for Toulouze, I was immediately convinced that such a violent shower had never fallen in that kingdom; for the destruction it had poured on the noble scene of cultivation, which but a moment before was smiling with exuberance, was terrible to behold. All now one scene of distress: the finest crops of wheat beaten so flat to the ground, that I question whether they can ever rise again; other fields so inundated, that we were actually in doubt whether we were looking on what was lately land, or always water. The ditches had been filled rapidly with mud, had overflowed the road, and swept dirt and gravel over the crops.

Cross.

Cross one of the finest plains of wheat that is any where to be seen; the storm, therefore, was fortunately partial. Pass St. Jorry; a noble road, but not better than in Limosin. It is a desert to the very gates of Toulouze; meet not more persons than if it were 100 miles from any town.—31 miles.

The 14th. View the city, which is very ancient and very large, but not peopled in proportion to its size: the buildings are a mixture of brick and wood, and have consequently a melancholy appearance. This place has always prided itself on its taste for literature and the fine arts. It has had a university since 1215: and it pretends that its famous academy of Jeux Floraux is as old as 1323. It has also a royal academy of sciences, another of painting, sculpture, and architecture. The church of the Cordeliers has vaults, into which we descended, that have the property of preserving dead bodies from corruption; we saw many that they assert to be 500 years old. If I had a vault well lighted, that would preserve the countenance and physiognomy as well as the flesh and bones, I should like to have it peopled with all my ancestors; and this desire would, I suppose, be proportioned to their merit and celebrity; but to one like this, that preserves cadaverous deformity, and gives perpetuity to death, the voracity of a common grave is preferable. But Toulouze is not without objects more interesting than academies; these are the new quay, the corn mills, and the canal de Brien. The quay is of a great length, and in all respects a noble work: the houses intended to be built will be regular like those already erected, in a stile awkward and inelegant. The canal de Brien, so called from the archbishop of Toulouze, afterwards prime minister and cardinal, was planned and executed in order to join the Garonne here with the canal of Languedoc, which is united at two miles from the town with the same river. The necessity of such a junction arises from the navigation of the river in the town being absolutely impeded by the wear which is made across it in favour of the corn mills. It passes arched under the quay to the river, and one sluice levels the water with that of the Languedoc canal. It is broad enough for several barges to pass abreast. These undertakings have been well planned, and their execution is truly magnificent: there is however more magnificence than trade; for while the Languedoc canal is alive with commerce, that of Brien is a desert.

Among other things we viewed at Toulouze, was the house of Monf. du Barrè, brother of the husband of the celebrated countess. By some transactions, favourable to anecdote, which enabled him to draw her from obscurity, and afterwards to marry her to his brother, he contrived to make a pretty considerable fortune. On the first floor is one principal and complete apartment, containing seven or eight rooms, fitted up and furnished with such profusion of expence, that if a fond lover, at the head of a kingdom's finances, were decorating for his mistress, he could hardly give in large any thing that is not here to be seen on a moderate scale.

scale. To those who are fond of gilding here is enough to satiate; so much that to an English eye it has too gaudy an appearance. But the glasses are large and numerous. The drawing-room very elegant (gilding always excepted).—Here I remarked a contrivance which has a pleasing effect; that of a looking-glass before the chimnies, instead of those various screens used in England: it slides backwards and forwards into the wall of the room. There is a portrait of Madame du Barrè, which is said to be very like; if it really is, one would pardon a King some follies committed at the shrine of so much beauty.—As to the garden, it is beneath all contempt, except as an object to make a man stare at the efforts to which folly can arrive: in the space of an acre, there are hills of genuine earth, mountains of paste-board, rocks of canvass: abbées, cows, sheep, and shepherdesses in lead; monkeys and peasants, asses and altars, in stone. Fine ladies and blacksmiths, parrots and lovers, in wood. Windmills and cottages, shops and villages, nothing excluded except nature.

The 15th. Meet Highlanders, who put me in mind of those of Scotland; saw them first at Montauban; they have round flat caps, and loose breeches: “Pipers, blue bonnets, and oat-meal, are found,” says Sir James Stuart, “in Catalonia, Auvergne and Swabia, as well as in Lochabar.” Many of the women here are without stockings. Meet them coming from the market, with their shoes in their baskets. The Pyrenees, at sixty miles distance, appear now so distinct, that one would guess it not more than fifteen; the lights and shades of the snow are seen clearly.—30 miles.

The 16th. A ridge of hills on the other side of the Garonne, which began at Toulouze, became more and more regular yesterday; and is undoubtedly the most distant ramification of the Pyrenees, reaching into this vast vale quite to Toulouze, but no farther. Approach the mountains; the lower ones are all cultivated, but the higher seem covered with wood: the road now is bad all the way. Meet many waggons, each loaded with two casks of wine, quite backward in the carriage, and as the hind wheels are much higher than the fore ones, it shews that these mountaineers have more sense than John Bull. The wheels of these waggons are all shod with wood instead of iron. Here, for the first time, see rows of maples, with vines, trained in festoons, from tree to tree; they are conducted by a rope of bramble, vine cutting, or willow. They give many grapes, but, bad wine. Pass St. Martino, and then a large village of well built houses, without a single glass window.—30 miles.

The 17th. St. Gaudens is an improving town, with many new houses, something more than comfortable. An uncommon view of St. Bertrand; you break at once upon a vale sunk deep enough beneath the point of view to command every hedge and tree, with that town clustered round its large cathedral, on a rising ground; if it had been built purposely to add a feature to a singular prospect,

spect, it could not have been better placed. The mountains rise proudly around, and give their rough frame to this exquisite little picture.

Cross the Garonne, by a new bridge of one fine arch, built of hard blue limestone. Medlars, plumbs, cherries, maples in every hedge, with vines trained.—Stop at Laureffe; after which the mountains almost close, and leave only a narrow vale, the Garonne and the road occupying some portion of it. Immense quantities of poultry in all this country; most of it the people salt and keep in grease. We tasted a soup made of the leg of a goose thus kept, and it was not nearly so bad as I expected.

Every crop here is backward, and betrays a want of sun; no wonder, for we have been long travelling on the banks of a rapid river, and must now be very high, though still apparently in vales. The mountains, in passing on, grow more interesting. Their beauty, to northern eyes, is very singular; the black and dreary prospects which our mountains offer are known to every one; but here the climate cloaths them with verdure, and the highest summits in sight are covered with wood; there is snow on still higher ridges.

Quit the Garonne some leagues before Sirpe, where the river Neste falls into it. The road to Bagnere is along this river, in a very narrow valley, at one end of which is built the town of Luchon, the termination of our journey; which to me has been one of the most agreeable I ever undertook; the good humour and good sense of my companions are well calculated for travelling; one renders a journey pleasing, and the other instructive.—Having now crossed the kingdom, and been in many French inns, I shall in general observe, that they are on an average better in two respects, and worse in all the rest, than those in England. We have lived better in point of eating and drinking beyond a question, than we should have done in going from London to the Highlands of Scotland, at double the expence. But if in England the best of every thing is ordered, without any attention to the expence, we should for double the money have lived better than we have done in France; the common cookery of the French gives great advantage. It is true, they roast every thing to a chip, if they are not cautioned: but they give such a number and variety of dishes, that if you do not like some, there are others to please your palate. The desert at a French inn has no rival at an English one; nor are the liqueurs to be despised.—We sometimes have met with bad wine, but, upon the whole, far better than such port as English inns give. Beds are better in France; in England they are good only at good inns; and we have none of that torment, which is so perplexing in England, to have the sheets aired; for we never trouble our heads about them, doubtless on account of the climate. After these two points, all is a blank. You have no parlour to eat in; only a room with two, three, or four beds. Apartments badly fitted up; the walls white-washed; or paper of different

different sorts in the same room; or tapestry so old, as to be a fit nidus for moths and spiders; and the furniture such, that an English innkeeper would light his fire with it. For a table, you have every where a board laid on cross bars, which are so conveniently contrived, as to leave room for your legs only at the end.—Oak chairs with rush bottoms, and the back universally a direct perpendicular, that defies all idea of rest after fatigue. Doors give music as well as entrance; the wind whistles through their chinks; and hinges grate discord. Windows admit rain as well as light; when shut they are not easy to open; and when open not easy to shut. Mops, brooms, and scrubbing-brushes are not in the catalogue of the necessaries of a French inn. Bells there are none; the *fille* must always be bawled for; and when she appears, is neither neat, well dressed, nor handsome. The kitchen is black with smoke; the master commonly the cook, and the less you see of the cooking, the more likely you are to have a stomach to your dinner; but this is not peculiar to France. Copper utensils always in great plenty, but not always well tinned. The mistress rarely classes civility or attention to her guests among the requisites of her trade.—30 miles.

The 28th. Having been now ten days fixed in our lodgings, which the Count de la Rochefoucauld's friends had provided for us; it is time to minute a few particulars of our life here. *Monf. Lazowski* and myself have two good rooms on a ground floor, with beds in them, and a servant's room; for 4 liv. (3s. 6d.) a-day. We are so unaccustomed in England to live in our bed-chambers, that it is at first awkward in France to find that people live no where else: At all the inns I have been in, it has been always in bed-rooms; and here I find, that every body, let his rank be what it may, lives in his bed-chamber. This is novel; our English custom is far more convenient, as well as more pleasing. But this habit I class with the œconomy of the French. The day after we came, I was introduced to the La Rochefoucauld party, with whom we have lived; it consists of the Duke and Duchesse de la Rochefoucauld, daughter of the Duke de Chabot; her brother, the Prince de Laon and his Princess, the daughter of the Duke de Montmorenci; the Count de Chabot, another brother of the Duchesse de la Rochefoucauld; the Marquis D'Aubourval, who, with my two fellow-travellers and myself, make a party of nine at dinner and supper. A *traiteur* serves our table at 4 liv. a head for the two meals, two courses and a good desert for dinner; for supper one course and a desert: the whole very well served, with every thing good in season: the wine separate, at 6s. (3d.) a bottle. With difficulty the Count's groom found a stable. Hay is little short of 5l. English per ton; oats much the same price as in England, but not so good: straw dear, and so scarce, that very often there is no litter at all.

The States of Languedoc are building a large and handsome bathing house, to contain various separate cells, with baths, and a large common room, with two
arcades

arcades to walk in, free from sun and rain. The present baths are horrible holes; the patients lie up to their chins in hot sulphureous water, which, with the beastly dens they are placed in, one would think sufficient to cause as many distempers as they cure. They are resorted to for cutaneous eruptions. The life led here has very little variety. Those who bathe, or drink the waters, do it at half after five or six in the morning; but my friend and myself are early in the mountains, which are here stupendous; we wander among them to admire the wild and beautiful scenes which are to be met with in almost every direction. The whole region of the Pyrenees is of a nature and aspect so totally different from every thing that I had been accustomed to, that these excursions were productive of much amusement. Cultivation is here carried to a considerable perfection in several articles, especially in the irrigation of meadows: we seek out the most intelligent peasants, and have many and long conversations with those who understand French, which however is not the case with all, for the language of the country is a mixture of Catalan, Provençal, and French.—This, with examining the minerals (an article for which the Duke de la Rochefoucauld likes to accompany us, as he possesses a considerable knowledge in that branch of natural history), and with noting the plants with which we are acquainted, serves well to keep our time employed sufficiently to our taste. The ramble of the morning finished, we return in time to dress for dinner, at half after twelve or one: then adjourn to the drawing room of Madam de la Rochefoucauld, or the Countess of Grandval alternately, the only ladies who have apartments large enough to contain the whole company. None are excluded; as the first thing done, by every person who arrives, is to pay a morning visit to each party already in the place; the visit is returned, and then every body is of course acquainted at these assemblies, which last till the evening is cool enough for walking. There is nothing in them but cards, trick-track, chess, and sometimes music; but the great feature is cards: I need not add, that I absented myself often from these parties, which are ever mortally insipid to me in England, and not less so in France. In the evening, the company splits into different parties, for their promenade, which lasts till half an hour after eight; supper is served at nine: there is, after it, an hour's conversation in the chamber of one of our ladies; and this is the best part of the day,—for the chat is free, lively, and unaffected; and uninterrupted, unless on a post-day, when the duke has such packets of papers and pamphlets, that they make us all politicians. All the world are in bed by eleven.

In this arrangement of the day, no circumstance is so objectionable as that of dining at noon, the consequence of eating no breakfast; for as the ceremony of dressing is kept up, you must be at home from any morning's excursion by twelve o'clock. This single circumstance, if adhered to, would be sufficient

to destroy any pursuits, except the most frivolous. Dividing the day exactly in halves, destroys it for any expedition, enquiry, or business that demands seven or eight hours attention, uninterrupted by any calls to the table or the toilette: calls which, after fatigue or exertion, are obeyed with refreshment and with pleasure. We dress for dinner in England with propriety, as the rest of the day is dedicated to ease, to converse, and relaxation: but by doing it at noon, too much time is lost. What is a man good for after his silk breeches and stockings are on, his hat under his arm, and his head *bien poudré*?—Can he botanize in a watered meadow?—Can he clamber the rocks to mineralize?—Can he farm with the peasant and the ploughman?—He is in order for the conversation of the ladies, which to be sure is in every country, but particularly in France, where the women are highly cultivated, an excellent employment; but it is an employment that never relishes better than after a day spent in active toil or animated pursuit; in something that has enlarged the sphere of our conceptions, or added to the stores of our knowledge.—I am induced to make this observation, because the noon dinners are customary all over France, except with persons of considerable fashion at Paris. They cannot be treated with too much ridicule or severity, for they are absolutely hostile to every view of science, to every spirited exertion, and to every useful pursuit in life.

Living in this way, however, with several persons of the first fashion in the kingdom, is an object to a foreigner solicitous to remark the manners and character of the nation. I have every reason to be pleased with the experiment, as it affords me a constant opportunity to enjoy the advantages of an unaffected and polished society, in which an invariable sweetness of disposition, mildness of character, and what in English we emphatically call *good temper*, eminently prevail:—seeming to arise—at least I conjecture it, from a thousand little nameless and peculiar circumstances—not resulting entirely from the personal character of the individuals, but apparently holding of the national one.—Besides the persons I have named, there are among others at our assemblies, the Marquis and Marchioness de Hautfort; the Duke and Duchess de Ville (this duchess is among the good order of beings); the Chevalier de Peyrac; Mons. l'Abbé Bastard; Baron de Serres; Viscountess Duhamel; the Bishops of Croire and Montauban; Mons. de la Marche; the Baron de Montagu, a chess player; the Chevalier de Cheyron; and Mons. de Bellecomb, who commanded in Pondicherry, and was taken by the English. There are also about half a dozen young officers, and three or four abbés.

If I may hazard a remark on the conversation of French assemblies, from what I have known here, I should praise them for equanimity but condemn them for insipidity. All vigour of thought seems so excluded from expression, that characters of ability and of inanity meet nearly on a par: tame and elegant,

elegant, uninteresting and polite, the mingled mass of communicated ideas has powers neither to offend nor instruct; where there is much polish of character there is little argument; and if you neither argue nor discuss, what is conversation?—Good temper, and habitual ease, are the first ingredients in private society; but wit, knowledge, or originality, must break their even surface into some inequality of feeling, or conversation is like a journey on an endless flat.

Of the rural beauties we have to contemplate, the valley of Larboussé, in a nook of which the town of Luchon is situated, is the principal, with its surrounding accompaniment of mountain. The range that bounds it to the north is bare of wood but covered with cultivation; and a large village, about three parts of its height, is perched on a steep, that almost makes the unaccustomed eye tremble with apprehension, that the village, church, and people will come tumbling into the valley. Villages thus perched, like eagles nests on rocks, are a general circumstance in the Pyrenees, which appear to be wonderfully peopled. The mountain, that forms the western wall of the valley, is of a prodigious magnitude. Watered meadow and cultivation rise more than one-third the height. A forest of oak and beech forms a noble belt above it; higher still is a region of ling; and above all snow. From whatever point viewed, this mountain is commanding from its magnitude, and beautiful from its luxuriant foliage. The range which closes in the valley to the east is of a character different from the others; it has more variety, more cultivation, villages, forests, glens, and cascades. That of Gouzat, which turns a mill as soon as it falls from the mountain, is romantic, with every accompaniment necessary to give a high degree of picturesque beauty. There are features in that of Montauban, which Claude Lorraine would not have failed transfusing on his canvass; and the view of the vale from the chestnut rock is gay and animated. The termination of our valley to the south is striking; the river Neste pours in incessant cascades over rocks that seem an eternal resistance. The eminence in the centre of a small vale, on which is an old tower, is a wild and romantic spot; the roar of the waters beneath unites in effect with the mountains, whose towering forests, finishing in snow, give an awful grandeur, a gloomy greatness to the scene; and seem to raise a barrier of separation between the kingdoms, too formidable even for armies to pass. But what are rocks, and mountains, and snow, when opposed to human ambition?—In the recesses of the pendent woods, the bears find their habitation, and on the rocks above, the eagles have their nests. All around is great; the sublime of nature, with imposing majesty, impresses awe upon the mind; attention is rivetted to the spot; and imagination, with all its excursive powers, seeks not to wander beyond the scene.

Deepens the murmurs of the falling floods,
And breathes a browner horror o'er the woods.

To view these scenes tolerably, is a business of some days; and such is the climate here, or at least has been since I was at Bagnere de Luchon, that not more than one day in three is to be depended on for fine weather. The heights of the mountains is such, that the clouds, perpetually broken, pour down quantities of rain. From June 26th to July 2d, we had one heavy shower, which lasted without intermission for sixty hours. The mountains, though so near, were hidden to their bases in the clouds. They do not only arrest the fleeting ones, which are passing in the atmosphere, but seem to have a generative power; for you see small ones at first, like thin vapour rising out of glens, forming on the sides of the hills, and increasing by degrees, till they become clouds heavy enough to rest on the tops, or else rise into the atmosphere, and pass away with others.

Among the original tenants of this immense range of mountains, the first in point of dignity, from the importance of the mischief they do, are the bears. There are both sorts, carnivorous and vegetable-eaters; the latter are more mischievous than their more terrible brethren, coming down in the night and eating the corn, particularly buck-wheat and maiz; and they are so nice in choosing the sweetest ears of the latter, that they trample and spoil infinitely more than they eat. The carnivorous bears wage war against the cattle and sheep, so that no stock can be left in the fields at night. Flocks must be watched by shepherds, who have fire-arms, and the assistance of many stout and fierce dogs; and cattle are shut up in stables every night in the year. Sometimes, by accident, they wander from their keepers, and if left abroad, they run a considerable risk of being devoured.—The bears attack these animals by leaping on their back, force the head to the ground, and thrust their paws into the body in the violence of a dreadful hug. There are many hunting days every year for destroying them; several parishes joining for that purpose. Great numbers of men and boys form a cordon, and drive the wood where the bears are known or suspected to be. They are the fattest in winter, when a good one is worth three louis. A bear never ventures to attack a wolf; but several wolves together, when hungry, will attack a bear, and kill and eat him. Wolves are here only in winter. In summer, they are in the very remotest parts of the Pyrenees—the most distant from human habitations: they are here, as every where else in France, dreadful to sheep.

A part of our original plan of travelling to the Pyrenees, was an excursion into Spain. Our landlord at Luchon had before procured mules and guides for persons travelling on business to Saragossa and Barcelona, and at our request wrote to Vielle, the first Spanish town across the mountains, for three mules and a conductor, who speaks French; and being arrived according to appointment, we set out on our expedition.

JULY 10th. My friend and myself are mounted on the two best mules, which are, however, but small; his servant, with our baggage, is on a third, and the owner of the mules, our conductor, marches on foot, boasting that his legs are good for fifteen leagues a day; this is his business; but we are not a little disappointed to find his French is pretty much that of a Spanish cow, if I may use a common French expression. From Bagnere to Luchon, we ascended incessantly, and, in our way, viewed the pastures in the French mountains, which the Spanish flock-masters hire for their sheep in summer; which, in emigrating, make thirteen days march every year from the lower parts of Catalonia. The management of these flocks is an object which must be explained elsewhere. Having satisfied ourselves with the examination, we returned to the direct road for Vielle, which quits the river Neste, about a league from Bagnere; it enters soon after one of the most wooded regions of the Pyrenees, and, at the same time, the most romantic. The way so bad, that no horses but those of the mountains could pass it; but our mules trod securely amidst rolling stones on the edges of precipices of a tremendous depth; but though sure footed, they are not free from stumbling; and, when they happen in those situations to trip a little, they electrify their riders in a manner not altogether so pleasantly as Mr. Walker. Pass the frontier line which divides France from Spain, and still rising on the mountains, we see the Spanish valley of Aran, with the river Garonne winding through it in a beautiful manner. The town of Bostose and the Spanish custom-house are at the foot of the mountains. This valley of Aran is richly cultivated; nothing scarcely can be finer than the view of it from heights so great as to render the common objects interesting; the road leads under trees, whose natural arches present, at every ten paces, new landscapes. The thick woods give fine masses of shade; the rocks large, and every outline bold; and the verdant vale, that is spread far below at your feet, has all the features of beauty, in contrast to the sublimity of the surrounding mountains. Descend into this vale, and halt at our first Spanish inn. No hay, no corn, no meat, no glass in the windows; but cheap, eggs and bread, and some small trout, 15*s*. (7*d.* $\frac{1}{2}$ English).

Follow hence the Garonne, which is already a fine river; but very rapid; the inhabitants of the mountains float trees to their saw-mills, which are at work cutting boards. The whole valley of Aran is well cultivated and highly peopled; it is a journey of eight hours, or about forty English miles in length, and has thirty-two villages, or rather little towns, which have a pretty appearance, the walls being well built, and the roofs well slated; but, on entering, the spectacle changes at once, for we found them the abodes of poverty and wretchedness; not one window of glass to be seen in a whole town; scarcely any chimnies; the rooms of both floors vomiting the smoke out of the windows.

Arrive

Arrive at Vielle, the capital of this valley, and the passage from the part of France we had left, to Barcelona; a circumstance which has given it some trifling resources. We were here informed, that we could not go into Spain without a passport: we waited, therefore, on the commandant, lieutenant-colonel and knight of Calatrava, who presides over the whole valley, and its thirty-two towns; his house was the only one we had seen in this part that had glass windows. In his ante-room, under a canopy of state, hung the King's picture. We were received with the Spanish formality, and assured, that a few months ago there was an order to send every foreigner, found without a passport, to the troops, which shews well enough the number of foreigners here. On each side of his excellency's bed was a brace of pistols, and a crucifix in the middle; we did not ask in which he puts the most confidence.

At Bagnere we were told that the inn at Vielle was good. We found the lower floor a stable, from which we mounted to a black kitchen, and, through that, to a baking room, with a large batch of loaves for an oven, which was heating to receive them. In this room were two beds for all the travellers who might happen to come; if too numerous, straw is spread on the floor, and you may rest as you can. No glass to the windows, and a large hole in the ceiling to clamber into the garret above it, where the windows were without shutters to keep out either rain or wind. One of the beds was occupied, so that my companion laid on a table. The house, however, afforded eggs for an omlet, good bread, thick wine, brandy, and fowls killed after we arrived. The people very dirty, but civil.—26 miles.

The 11th. Left Vielle, and took that route to Barcelona, which is by the *porte* (passage across the mountains) of Pias; another somewhat shorter being represented as exceedingly steep and difficult, and the country to that city worse. Pass several of the thirty-two villages of the valley of Aran, that crowd on each other, so that the population must be very great. It results here, from the division of property, and from the plenty of cattle and fuel yielded by the mountains belonging to every parish.

Pass Arteas and Jasa; cross the river that falls into the Garonne; there is a fine view of the mountains over the former of these places, of wood, rock, and snow. The trees floating down the Garonne strike their ends against the rocks in it, and make a most singular noise, very much like thunder. Pass Salardeau and Tradoze, which is the last village of the valley, and near it the source of the river Garonne to the left; but a stream to the right, which we passed, seems rather larger. All the villages we have seen appear equally wretched; chimnies too great a luxury to look for in any of them. Vast rocks of granite are rolled promiscuously from the mountains, and innumerable springs pour down their sides.

We

We then mounted to the very top of the Pyrenees, much above some of the remaining snow, and from the summit have a tremendous view of ridges of mountains, one beyond another, in Catalonia, many of them with snowy tops, to the distance of fifty or sixty miles. It took us four hours and three quarters to get to the top of the highest ridge; yet, when we began to ascend, we must have been, if we may judge from the rapidity of the Garonne for several hundred miles from hence to Bourdeaux, on some of the highest land in Europe. No wood at the top, but pasturage, amongst rocks of micaceous schistus, for great herds of cows and oxen that breathe the pure air of this elevated region.

The springs we now meet with flow towards the Mediterranean; pass a church that stands by itself in the descent, and a beautiful cascade of five or six different falls, which pour down a torrent not less than five hundred feet amongst wood; a vast rock above it; the whole a great but savage view. The trees here (pines) are finer than on the French hills; they are all cut for the Toulouse market, being carried over the mountains, and floated down the Garonne; from which we may draw conclusions on the comparative demand of the two kingdoms.

Pass a spot where an earthquake threw down part of a mountain, stopped a stream, and formed a large pond: it must have been a dreadful convulsion, for the spot is now a waste of immense fragments of rock, large as cottages, that are tumbled about in such ruinous confusion as to be truly horrible to view. The tradition is, that four men and their mules were buried under them. Come to the valley of Esteredano, where wheat and rye are cut. Every scrap on the descent is cultivated; it commands an extensive savage view of mountains, with patches of culture scattered about the declivities. The prospect down the vale beautiful.

Cross an arch at the junction of two rivers, on which rafters are now formed of plank and trees, and floated down. Reach Scullów; the inn so bad, that our guide would not permit us to enter it; we therefore went to the house of the curé. A scene followed so new to English eyes, that we could not refrain from laughing very heartily. As our reverend host had a chimney in his kitchen, we did not quarrel with the want of glass in his windows: he ran to the river to catch trout; a man brought some chickens, that were put to death on the spot. For light, they kindled splinters of pine, and two merry wenches and three or four men collected to stare at us, as well as we at them, were presently busy to satisfy our hunger. They gave us red wine, so dreadfully putrid of the boraccio, that I could not touch it; and brandy, poisoned with anniseed. What then were we to do? Seeing our distress, they brought out a bottle of rich, excellent white wine, resembling mountain; all then was well: but

but when we came to examine the beds, there was but one to be found. My friend would again do the honours, and insisted on my taking it: he made his on a table, and what with bugs, fleas, rats, and mice, slept not. I was not attacked; and though the bed and a pavement might be ranked in the same class of softness—fatigue converted it to down. This town and its inhabitants appeared equally wretched; the smoke holes, instead of chimnies, the total want of glass windows, the cheerfulness of which, to the eye, is known only by the want; the dress of the women all black, with cloth of the same colour about their heads, and hanging half down their backs, no shoes, no stockings; the effect, upon the whole, as dismal and savage as their rocks and mountains.

—32 miles.

The 12th. The hills on each side are now almost close, and just admit the river, the road, and a scrap of meadow. The rocks lamellated schistus, some micaceous. Lavender, for the first time, spontaneous. Pass Briasca, a village perched on a mountain like an eagle's nest. Come to Labourfel, where is an iron work, steel and iron made at the same time, and the furnace blown by the fall of water simply, without bellows. The water falls about ten feet, and, by its motion, drives the air into a sort of tunnel, which points to the centre of the furnace; the bottom of the mass of melted metal is steel; the middle of it soft, and the upper part hard iron. They burn charcoal made of pine wood. Pass Rudás on the top of a rocky mountain, and come presently to vines and fruit-trees, yet snow in sight. As we descend to the vale, every spot is cultivated that is capable of it. Cross the river to Realp, a long town with many shops, in which hemp fabrics seem a principal article. Hedges of pomegranates in blossom. Dine at a dreadful auberge, which, instead of satisfying, offended all the senses we were masters of.

Hitherto, in Catalonia, we have seen nothing to confirm the character given of that province; for scarcely any thing has a tolerable appearance; the towns and the country appear equally poor and miserable.

Come to Jaré, whose environs wear a better countenance, on account of an immense salt-work belonging to the King. Here first meet with olives, and going up the mountain, which is all of pudding-stone, find it cut into terraces supported by walls, and planted with vines, mulberries, and olives.

The road then led through a pass in the mountains, which presented, I think, without exception, the most striking scene that I had ever beheld. I remember the impression that the ocean made on me the first time I saw it, and believe it to have been weaker than this; I shall not spend many words in attempting to describe what the pencil itself in the hands of a master would fail to convey an adequate idea. The pass is above a mile long; the rocks seem rent asunder to make way for the river, which entirely fills the bottom of the chasm.

chasm. The road was cut out of the rock, and was wrought with gunpowder, a work of prodigious labour and expence. It passes on heights that vary the scene, and that give a depth below the eye enough to be interesting. The mountains of stone, which rise on either side, are the most tremendous in their height, magnitude, and pendent form, that imagination can conceive. Were all the rocks of England piled on one another, they would form but pigmy heaps, compared with these gigantic and stupendous masses. Rocks are commonly, even in their most bold appearances, detached parts of mountains; and, however great in themselves, have masses above them, which lessen their effect. It is otherwise here: if we suppose the skeletons of mountains laid bare to the eye, it will be but a vague idea. Vastness of size, perpendicularity of form—pendent—and protruding—every circumstance that can give a power to inanimate nature, to command and arrest attention, is spread forth with an imposing magnificence through every feature of this sublime scenery.

Pass Coolagase, the features of the country now begin to relax; the mountains are not so high, and the vales are wider. Arrive at La Pobla, after a fatiguing journey of thirty-six English miles, more than half of which, as in general, we made on foot. Here we fared sumptuously, for report made the inn so bad, that we took refuge with a shopkeeper. It seems an extraordinary circumstance, that in these parts of Spain you ride to the door of a private house, desire lodging and food, and pay of course what they demand. However, it must always be taken into the account of our fare, that the wine of all the country is so poisoned with the boraccio, that water is the best beverage, unless anniseed brandy should be to your taste. Salads also, a principal dish with them, are not eatable, by reason of the oil of the country being strong and rancid; a quality which the inhabitants seem to think essential to good oil, for they every where gave it the highest praises. This town has some good houses with glass windows; and we saw a well dressed young lady, attended in a gallant manner by two monks.—36 miles.

The 13th. Leave La Pobla, and cross the river, which is sixty yards wide; it compensates, by the use made of its waters in irrigation, the mischief it does in floods, for we passed two large tracts destroyed by it. The mountains around of bold and interesting features; the country in general a mixture of cultivation and waste, for some space pleasing enough to the eye; but they have no meadows, so that our mules have met with nothing like hay; straw and barley are their food; and they tell us, that all over Spain it is the same thing, with some exceptions in watered lands for lucerne. Much corn threshing every where.

The road leads by Monte Esquieu, the whole of which consists of a white stone and argillaceous marle. Look back over a great prospect, but destitute of wood. Ourcasó a poor place: there, as every where else, the first floor is a stable, which is cleaned out not more than once or twice a year, when the land is ready to receive the dung. The delicious effluvia given to the rest of the house, in so hot a climate, may be conjectured: rising into the kitchen and the chambers, it there meets with such a variety of other unfavoury essences, as to form compounds sufficient to puzzle the most dextrous of the aërial philosophers to analyze. All their white wine here is boiled. Descend mountains terraced for olives, which grow well on rocks, but add no beauty to them; inasmuch that cloathing a country with this most ugly of all trees adds nothing to the pleasure of the eye.

Pass in sight of St. Roma, and cross a district of shells, and a large waste entirely covered with lavender.

Pass up a hill which commands a vast prospect of distant mountains, W. S. W. they are in Arragon; very high; and seen one beyond another to a great distance; also the snowy ones of the Pyrenees which we have left. Following the road, we see it opening to an immense view of what at first appears to be a plain, a great range of country towards the sea; but it is all broken in mountainous ridges, which seem low, merely on comparison with the greater heights from which we view them. The Pyrenees in one great chain to the left, and the mountains of Tortosa to the right. Descend to Fulca, where we stop for the night at an inn kept by a considerable farmer, and meet, for Spain, with tolerable accommodation. We had here, in the evening, a most tremendous tempest. The lightning which I have seen in England has been a mere glimmering, compared with the dreadful coruscations of this ardent and electric atmosphere. A range of the Pyrenees was in sight for one hundred miles in a line; the forked flashes of the lightning darted in streams of fire to the length of half that extent, and much of it from an immense height. The colour was of the brightest whiteness; the scene was great, awful, and sublime.—28 miles.

The 14th. In the morning the hemisphere was all heavy with clouds, and some rain fell; we expressed apprehensions of being wet, but our landlord said we should have a very fine day; we had confidence, and it proved a clear burning one.

Here I may observe, that in above one hundred miles in Catalonia, we have seen but two houses that appeared decidedly to be gentlemen's, one the governor's at Viella, and the other in the town of La Pobla; and in the same line of country not more than one acre probably in two hundred is cultivated. Thus far, therefore, we have experienced an entire disappointment in the expectation of finding this province a garden.

Pass

Pass the side of a mountain covered with rosemary, box, and brambles, and descend into a rich vale to the town of Pous. Cross the river Segre by a most commodious ferry boat, much better executed and contrived for carriages and horses, than any I have seen in England. I have crossed the Thames, the Severn, and the Trent, but never saw any in which the horses were not forced to leap through a narrow cut in the side of the boat to the imminent danger of being lamed: and I have known both cows, oxen, and horses killed in the operation. A carriage may be driven in and out of this ferry boat without taking off a horse, or a person moving from his seat. The boat crosses the river by a great rope passing over a lanthorn wheel. The care and attention given to irrigation here cannot be exceeded. Much silk winding.

They thresh their corn by driving mules in the oriental method on a circular floor of earth in the open air; a girl drives; three and four men turn the straw, move it away, and supply the floor.

Pass a waste of marle, with strata of talc in some places clear and transparent, shining, and breaking in thin flakes.—Deserts for several miles. Pass Ribelles, a village whose white church and houses, on the pinnacle of a rocky hill, have a singular effect in the midst of an uncultivated dreary tract. Dine at Senavia; the day excessively hot, and the flies so innumerable, as to be a perfect plague. They have a good contrivance for keeping them off the table you eat at, which is a moveable and very light frame of canvass, suspended from the ceiling by two pivots, and a girl keeps pulling it backwards and forwards while you are at table: the motion it gives the air drives off the flies. Where this invention is not adopted, she uses a hand-flapper for the same purpose, fanning in a droll manner, and far from disagreeable, when the girl is pretty. Pass many watered grounds, with peaches, apples, and ripe pears. Pomegranates in the hedges as large now as walnuts in the shell. To Biosca mostly desert hills, but with some broad vales. No where any wood to be seen, except olives, and evergreen oaks, which are almost as sad as olives. Towards Torá the country is more cultivated, and has some scattered houses, which I note as a new circumstance. Pass Castle Folit. The country improves to Calaf, where we arrived after a burning journey of 40 English miles, having been fourteen hours on our mules.—40 miles.

The 15th.—Sunday. To mass at four in the morning: the church almost full of muleteers; it was evident that we were in Spain, from the fervency of devotion with which they beat their breasts at some of the responses in the service. How far this *violent* attention to religion is connected with the wretched state of their province, I shall leave to others to determine. One thing, which surprised me a good deal, was seeing great numbers of men going out of town with reap-hooks to cut their corn, just as on any other day; this must be with the

leave of their priests; and to give such permission, speaks more liberality than I had been taught to expect.

Cross a great waste, and mount a hill, from whence an extensive view over a naked country; and, for the first time, we see Montserrat, the outline of which is interesting. Dine at Camprat, in the midst of a rocky country, of a savage aspect, with so many wastes, that not one acre in an hundred is cultivated. Arrive at the foot of Montserrat, which, from the description given of it by Mr. Thicknes, was one object of our journey.

It is a remarkably isolated mountain, but of an immense basis. An admirable winding road is made, by which we mounted to the convent; to make this way was a great effort in a country where so few good roads are to be found. Much of this is hewn out of the live rock. In other respects, it is one of the most singular in the world. On the right hand is a wall of mountain fringed with wood, at the top of which are those stupendous rocks, which render it famous: to the left a precipice horrible for depth, but all covered with plants, which in England are sought with anxiety and expence for adorning shrubberies and gardens; and vegetation here has the luxuriance which may be expected in one of the finest climates of the world. The road so level, and these beautiful plants so thick, that they altogether resemble the alley of a decorated ground. The scenery on which you look is every where uncommon; such a confusion of shades and masses; such a tumult of forms, that the eye wanders with a kind of amazement from part to part, without being able to repose in the quiet command of any distinct object.

We arrived at the convent in time for the evening hymns and music. The church is splendid, some of the pictures fine, and the multitude of offerings of diamonds, rubies, and all other precious stones, with the quantity of gold and silver lamps, vases, &c. are the last objects for me to dwell on, since they never raise any other emotion in my bosom than of disgust. I hate the folly that gives; and if the monks are honest, I hate the folly that receives.

On our arrival we were conducted to a neat, plain apartment in the convent, of two rooms furnished with mere necessaries, and we were supplied by the servants with such food and wine as we requested, at a very moderate expence. To this useful species of hospitality, we were obliged for a comfortable night's rest.
—27 miles.

The 16th. The principal object which had induced us to take Montserrat in our way, was the amazing prospect commanded from the top of the mountain, and from the various hermitages described by Mr. Thicknes. This morning we walked up the hill, but the weather proved so perverse to our views, both in mounting and descending, that we were the whole time in the clouds. I should most willingly have staid two or three days here, and waited for a better time;

time; but my friend was in such a hurry to return to Bagnere to the Count de la Rochefoucauld, that we must have separated, had I done it. In such tours as these, it is always best to take a superfluity of time; a thing very difficult to do when one travels in company; and that of *Monf. L.* was much too valuable and interesting to me to allow such a question for a moment. All we could do in our elevated situation, was to mortify ourselves with imagining the prodigious prospect before us, without a possibility of seeing five hundred yards, for the clouds were beneath as well as around us. We stopped at one of the hermitages, the inhabitant of which, a Maltese of a gentleman-like deportment and manners, received us hospitably and politely, setting out bread, wine, and fruit. He lamented our ill luck, telling us that the island of Majorca was distinctly to be seen from his little garden, which we viewed with pleasure, but should have been better pleased to have seen Majorca. But though the distant prospect was thus excluded, we had the opportunity to examine and admire the uncommon and striking form of the rocks, of which this most interesting mountain is composed; the whole seems one vast mass of pudding stone.

Leave the convent, and take the road for Barcelona, which, in richness of vegetable accompaniment, is inferior to that by which we came; we were several miles descending. Pass *Orevoteau*, where is a hedge of aloes four feet high: here we are in a high road, for we meet for the first time a cabriolet. Pass a wretched stoney desert, which yields only aromatic plants, scattered with dismal evergreen oaks. *Esparagara* is the first manufacturing town we met with; woollen cloths, stuffs, and laces: the town is near a mile long. Near *Martorell*, see the triumphal arch, said to be built by *Annibal*; it has been lately repaired. In that town every one is employed in lace making; they have, however, another occupation not quite so agreeable to the eye, that of picking vermin out of each other's heads, in which numbers of them were employed; nor can any thing be more stinking or filthy than their persons, or more dirty than their houses: to view either, is enough to impress the idea, that cleanliness is one of the first of the virtues, and doubly so in such a hot climate. No new houses in any of these towns. The country is disagreeable, and rendered worse by many beds of torrents, without a drop of water; arid and hurtful to the eye. Apricots, plumbs, melons, &c. ripe, and sold in the streets.

Come to a noble road, which they are making at the expence of the King; fifty or sixty feet wide, and walled on the side to support the earth, of which it is formed. The country now is far more populous and better built, many vines, and much cultivation.

It will probably be found, that the great reputation of this province has arisen from the improvements in the lower, flat, and irrigated parts; if so, it ought to be discriminated; for by far the larger part of it is mountainous, not less in proportion,

portion, I should conceive, than seven-eighths. Pass a large paper mill; and continuing on the same fine road, join another equally great and well made, that leads to Villa Franca. Turn to the left for Barcelona, and cross a bridge of red granite, a solid, durable, and noble work, 440 paces long; but, though built only eight years ago, is in a bad and inelegant stile. Now meet a great number of carts and carriages, drawn by very fine mules, and mark every appearance of approaching a great city. Within two or three miles of it, there are many villas and good buildings of all sorts, spreading to the right and left, and seen all over the country. I have been at no city since we left Paris, whose approach carries such a face of animation and cheerfulness; and considering Paris as the capital of a great kingdom, and Barcelona as that of a province only, the latter is more striking beyond all comparison. This noble road does honour to the present King of Spain; it is carried in an even line over all narrow vales, so that you have none of the inconveniencies which otherwise are the effect of hills and declivities. A few palm trees add to the novelty of the prospect to northern eyes. The first view of the town is very fine, and the situation truly beautiful. The last half mile we were in great haste to be in time for the gates, as they are shut at nine o'clock. We had had a burning ride of forty miles, and were a good deal fatigued, yet forced to undergo a ridiculous search, as every thing pays an *entrée* to government on going into the town; and we had still two miles I believe to pass, first to the French Crown, which inn was full, and then to *La Fonde*, where we found good quarters.

My friend thought this the most fatiguing day he had ever experienced: the excessive heat oppressed him much; and, indeed, travellers in general are much more prudent than to ride during the whole day in the middle of July, choosing rather to expose themselves to fatigue here in the morning and evening only. But after a succession of dog holes, with perpetual starving and mortification in the mountains, the contrast of this inn was great. It is a very good one, with many waiters, active and alert as in England. A good supper, with some excellent Mediterranean fish; ripe peaches; good wine; the most delicious lemonade in the world; and good beds, all tended to revive us; but *Monf. Lazowski* was too much fatigued for enjoying them.—40 miles.

The 17th. View the town, which is large, and to the eye, in every street, remarkably populous: many of them are narrow, which may be expected in an old town; but there are also many others broader, with good houses; yet one cannot on the whole consider it as well built, except as to public edifices, which are erected in a magnificent stile. There are some considerable openings, which, though not regular squares, are ornamental, and have a good effect in setting off the new buildings to the best advantage. One quarter of the city, called *Barcelonetta*, is entirely new, and perfectly regular; the streets cutting each other at
right

right angles ; but the houses are all small and low, being meant for the residence of sailors, little shop-keepers, and artisans : one front of this new town faces the quay. The streets are lighted, but the dust so deep in some of them, especially the broader ones, that I know not whether they are all paved. The governor's house and the new fountain are on a scale, and in a style, which shews, that there are no mean ideas of embellishment here. The royal foundry for cannon is very great. The buildings spacious, and every thing seems executed in a manner that proves no expence was spared. The guns cast are chiefly brass : they are solid ; and some 24 pounders boring ; perhaps in all mechanics the most curious operation, and which can never be viewed without paying some homage to the genius that first invented it. In time of war 300 men are employed here ; but at present the number is not considerable.

But the object at Barcelona which is the most striking, and which, according to my knowledge at least, has no where a rival, is the quay. The design and execution are equally good. I guess it about half a mile long. A low platform of stone is built but a few feet above the water, close to which the ships are moored ; this is of breadth sufficient for goods and packages of all sorts in loading and unloading the vessels. A row of arched warehouses open on to this platform, and over those is the upper part of the quay on a level with the street ; and for the convenience of going up or down from one to the other, there are gently sloping ways for carriages, and also stair-cases. The whole is most solidly erected in hewn stone, and finished in a manner, that discovers a true spirit of magnificence in this most useful sort of public works. The road by which we travelled for several miles—the bridge by which we passed the river—and this quay, are works that will do lasting honour to the present King of Spain. There are now about 140 ships in the harbour ; but the number sometimes much larger.

It is impossible to view such admirable works as the quay of Barcelona, without regretting the enormous sums wasted in war and bloodshed. No quarrel happens between two nations, but it costs twenty such quays ; a thousand miles of magnificent road ; an hundred bridges ; the pavement, lights, fountains, palaces, and public ornaments of fifty cities. To tell a prince or a parliament (the latter wants this lesson to the full as much as the former), that a war is as absurd as it is cruel, for it will cost so much money in figures, makes not the least impression ; they never see the money, and the expence is of something ideal ; but to tell the King of Spain that it would cost the Escorial, St. Ildefonso, his palace at Madrid, and all the roads in his kingdom, and he would think very seriously before he engaged in it. To reason with a British parliament, when her noisy factious orators are bawling for the honour of the British lion, for the rights of commerce, and freedom of navigation ; that is, for a war—that such a war will cost an hundred millions sterling, and they are deaf to you. But let it cost them
those

those roads on which they roll so luxuriously, the public bridges, and the great edifices that decorate the capital, and our other cities, if the members were willing at such a price to hazard a war, the people would probably pull down their houses. Yet the cases are precisely the same; for if you spend the money that would form and build such things, you in effect spend the things themselves. A very little calculation would shew, that the expence of our three last wars, which had no other effect whatever but to spill blood and fill gazettes, would have made the whole island of Great Britain a garden; her whole coast a quay; and have converted all the houses in her towns into palaces, and her cottages into houses. But to return.

The manufactories at Barcelona are considerable. There is every appearance as you walk the streets of great and active industry: you move no where without hearing the creak of stocking engines. Silk is wrought into handkerchiefs, though not on so great a scale as at Valencia; stockings, laces, and various stuffs. They have also some woollen fabrics, but not considerable. The chief business of the place is that of commission; the amount of the trade transacted is considerable, though not many ships belong to the port.

The industry and trade, however, which have taken root, and prospered in this city, have withstood the continued system of the court to deal severely with the whole province of Catalonia. The famous efforts which the Catalans made to place a prince of the House of Austria on the throne of Spain, were not soon forgotten by the princes of the House of Bourbon, to their dishonour. Heavy taxes have been laid on the people; and the whole province continues to this day disarmed; so that a nobleman cannot wear a sword, unless privileged to do it by grace or office; and this goes so far, that in order to be able to shew this mark of distinction, they are known to get themselves enrolled as familiars of the inquisition, an office which carries with it that licence. I note this correctly according to the information given me; but I hope the person who gave it was mistaken. For the nobility to stoop to such a meanness, and the court to drive men to such unworthy means of distinction, fourscore years after their offence, which was fidelity to the prince whom they esteemed their lawful sovereign, such an act reflects equal dishonour upon the nobility and the crown. The mention of the inquisition made us enquire into the present state of that *holy* office, and we were informed, that it was now formidable only to persons of very notorious ill fame; and that whenever it does act against offenders, an inquisitor comes from Madrid to conduct the process. From the expressions, however, which were used, and the instances given, it appeared that they take cognizance of cases not at all connected with faith in religion; and that if men or women are guilty of vices, which render them offensive, this was the power that interposed; an account, in my opinion, by no means favourable for the circumstance, which was supposed most

to limit their power, was the explicit nature of the offence, viz. being against the Catholic faith, and by no means against public morals, to secure which is an object for very different judicatures in every country.

The markets here are now full of ripe figs, peaches, melons, and the more common fruits in great profusion. I bought three large peaches for a penny, and our *laquais de place* said, that I gave too much, and paid like a foreigner; but they have not the flavour of the same fruit in England. In the gardens there are noble orange trees loaded with fruit, and all sorts of garden vegetables in the greatest plenty. The climate here in winter may be conjectured from their having green pease every month in the year.

View the very pretty fort to the south of the town, which is on the summit of a hill that commands a vast prospect by sea and land. It is exceedingly well built and well kept. Notwithstanding this fort to the south, and a citadel to the north of the town, corsairs in time of war have cut fishing vessels out of the road, and very near the shore.

In the evening to the play; the theatre is very large, and the seats on the two sides of the pit (for the centre is at a lower price) extremely commodious; each seat is separate, so that you sit as in an elbow chair. A Spanish comedy was represented, and an Italian opera after it. We were surprized to find clergymen in every part of the house; a circumstance never seen in France. Twice a week they have an Italian opera, and plays the other evenings. In the centre of the pit on benches the common people seat themselves. I saw a blacksmith, hot from the anvil, with his shirt sleeves tucked above his elbows, who enjoyed the entertainment equally with the best company in the boxes, and probably much more. Every well dressed person was in the French fashion; but there were many who still retained the Spanish mode of wearing their hair without powder, in a thick black net which hangs down the back: nothing can have a worse effect, or appear more offensive in so hot a climate.

The 18th. On leaving the town we were searched again, which seems both useless and burthensome. Enter immediately an extraordinary scene of watered cultivation, so fine, that I suppose it has given the general reputation to the whole province. The Indian fig, called here *figua de Maura*, grows six or seven feet high, very branching and crooked; the arms at bottom as thick as the thigh of a common man; these and many aloes in the hedges. At Ballalo, two hours from Barcelona, meet with the first vineyards, but the hills here, for the most part, come down to the sea; and where they do not, the vale is not more than half a mile wide. Lycium in the hedges; oranges in the gardens; a few palm trees with vines around them. All here inclosed, and the men mending gaps in their hedges. The appearance of industry on this coast is as great as possible. Numbers of fishing boats and nets, with rows of good white houses on the sea

side; and while the men are active in their fisheries, the women are equally busy in making lace. Dine at Gremah: many large villages and scattered houses all the way. Wherever there is an opening in the mountains, more distant and still higher ones are seen; a circumstance which unites with the vast view from Montserrat, and shews that all behind is mountainous, and that the vales are no where large. Pass a valley, part highly cultivated, but the rest for a quarter of a mile of breadth totally ruined by a torrent. Reach Martaró, a large town of white and clean well built houses, the streets crossing each other at right angles. The inhabitants appear exceedingly industrious; there are some stocking engines, and lace makers at every corner. Every house has one large door, which serves both for door and window to that room; an undoubted proof of the warmth of the climate. I am sorry to add, that here also the industry of catching vermin in each other's heads is very active.

Pass Arenys, a large town, where shipbuilding seems a business of some consequence: making thread lace universal here; the thread comes from France. Canet, another large town, employed in shipbuilding, fishing, and making lace. All these towns are well built, with an equal appearance of general industry, and its inseparable companion, private comfort. Every scrap of flat land well cultivated, and the hills covered with vines.

At Callella, a large town like the former, full of industry, but the inn no better than in the mountains, a stinking, dirty, dreadful hole, without any thing to eat or drink but for muleteers; yet we are now in the high road from Paris to Madrid.—36 miles.

The 19th. Leave Callella, and in less than a league come to Pineda, another large town, and pass Malgrat, which is not so well built as the preceding, but much lace made in it.

The road here turns from the sea into an inclosed woodland. Pomegranates make very fine thick hedges. There are old castles on the hills to defend the coast against the Africans. Houses scattered every where, a feature essential to a fine country, and an agreeable landscape. Poplars planted in some fields, and vines trained from one to another. From reading accounts of this husbandry, I had formed an idea that it must be singularly beautiful to see festoons of vines hanging from tree to tree; but there is nothing either pleasing or striking in it. The Pyrenees are now in front, with very high mountains to the left, with their heads in the clouds.

Pass for several miles a country much mixed with wastes; and come to a very large one spreading over several extensive hills for many miles, that presents an extraordinary spectacle to northern eyes. It is a thicket of aromatic plants, and beautiful flowering shrubs, with but a small mixture of plants common in England. Large spreading myrtles three or four feet high, jessamins, honey suckles,

suckles, lavender, rosemary, bay, lentiscus, tamarisc, cassia, &c. &c. but all nuisances here even worse than heath with us, for we see neither sheep nor goats. Pass Goronota, and many wastes for some miles on gentle slopes, and come again to a thick woodland inclosed country, like some parts of England. Many hedges of the yellow blossomed prickly acacia, which answers well for that purpose. Reach Girona, an old town walled and fortified with some redoubts, and a fort on the hill above it; but not kept up, nor indeed would it stop an army half an hour. Here is a cathedral and a bishop, who gave us his blessing as we passed him, drawn in his coach by six mules. His revenue is 24,000 French livres; there are *curées*, who have from 1200 to 3000 livres. They tithe no live stock. They have no manufactures of any consequence, and no resource but that of agriculture; yet, what is extraordinary, Castilian and French workmen come hither for employment.—36 miles.

Snow is on the Pyrenees as well as at Bagnere de Luchon.

JULY 21. Leave Junquerras, where the countenances and manners of the people would make one believe all the inhabitants were smugglers. Come to a most noble road, which the King of Spain is making; it begins at the pillars that mark the boundaries of the two monarchies, joining with the French road: it is admirably executed. Here take leave of Spain and re-enter France: the contrast is striking. When one crosses the sea from Dover to Calais, the preparation and circumstance of a naval passage lead the mind by some gradation to a change: but here, without going through a town, a barrier, or even wall, you enter a new world. From the natural and miserable roads of Catalonia, you tread at once on a noble causeway, made with all the solidity and magnificence that distinguish the highways of France. Instead of beds of torrents you have well built bridges; and from a country wild, desert, and poor, we found ourselves in the midst of cultivation and improvement. Every other circumstance spoke the same language, and told us by signs not to be mistaken, that some great and operating cause worked an effect too clear to be misunderstood. The more one sees, the more I believe we shall be led to think, that there is but one all-powerful cause that instigates mankind, and that is GOVERNMENT!—Others form exceptions, and give shades of difference and distinction, but this acts with permanent and universal force. The present instance is remarkable; for Roussillon is in fact a part of Spain; the inhabitants are Spaniards in language and in customs; but they are under a French government.

Great range of the Pyrenees at a distance. Meet shepherds that speak the Catalan. The cabriolets we meet are Spanish. The farmers thresh their corn like the Spaniards. The inns and the houses are the same. Reach Perpignan; there I parted with Mons. Lazowski. He returned to Bagnere de Luchon, but I had planned a tour in Languedoc, to fill up the time to spare.—15 miles.

The 22d. The Duke de la Rochefoucauld had given me a letter to Monf. Barri de Lasseufes, major of a regiment at Perpignan, and who, he said, understood agriculture, and would be glad to converse with me on the subject. I sallied out in the morning to find him, but being Sunday, he was at his country-seat at Pia, about a league from the town. I had a roasting walk thither, over a dry stoney country under vines. Monf. Madame, and Mademoiselle de Lasseufes, received me with great politeness. I explained the motives of my coming to France, which were not to run idly through the kingdom with the common herd of travellers, but to make myself a master of their agriculture; that if I found any thing good and applicable to England, I might copy it. He commended the design greatly; said it was travelling with a truly laudable motive; but expressed much astonishment, as it was so uncommon; and was very sure there was not a single Frenchman in all England on such an errand. He desired I would spend the day with him. I found the vineyard the chief part of his husbandry, but he had some arable land, managed in the singular manner of that province. He pointed to a village which he said was Rivesalta, which produced some of the most famous wine in France; at dinner I found that it merited its reputation. In the evening returned to Perpignan, after a day fertile in useful information.—8 miles.

The 23d. Take the road to Narbonne. Pass Rivesalta. Under the mountain there is the largest spring I ever saw. Otters-Pool and Holywell are bubbles to it. It rises at the foot of the rock, and is able to turn immediately many mills; being at once rather a river than a spring. Pass an uninterrupted flat waste, without a single tree, house, or village for a considerable distance: by much the ugliest country I have seen in France. Great quantities of corn every where treading out with mules, as in Spain. Dine at Sejean, at the Soleil, a good new inn, where I accidentally met with the Marquis de Tréssan. He told me, that I must be a singular person to travel so far with no other object than agriculture: he never knew nor heard of the like; but approved much of the plan, and wished he could do the same.

The roads here are stupendous works. I passed a hill, cut through to ease a descent, that was all in the solid rock, and cost 90,000 liv. (3,937l.) yet it extends but a few hundred yards. Three leagues and an half from Sejean to Narbonne cost 1,800,000 liv. (78,750l.) These ways are superb even to a folly. Enormous sums have been spent to level even gentle slopes. The causeways are raised and walled on each side, forming one solid mass of artificial road, carried across the vallies to the height of six, seven, or eight feet, and never less than 50 wide. There is a bridge of a single arch, and a causeway to it, truly magnificent; we have not an idea of what such a road is in England. The traffic of the way, however, demands no such exertions; one-third of the breadth is beaten, one
third

third rough, and one-third covered with weeds. In 36 miles, I have met one cabriolet, half a dozen carts, and some old women with asses. For what all this waste of treasure?—In Languedoc, it is true, these works are not done by *corvées*; but there is an injustice in levying the amount not far short of them. The money is raised by *tailles*, and, in making the assessment, lands held by a noble tenure are so much eased, and others by a base one so burthened, that 120 arpents in this neighbourhood, held by the former, pay 90 liv. and 400 possessed by a plebeian right, which ought proportionally to pay 300 liv. is, instead of that, assessed at 1400 liv. At Narbonne, the canal which joins that of Languedoc deserves attention; it is a very fine work, and will, they say, be finished next month.—36 miles.

The 24th. Women without stockings, and many without shoes; but if their feet are poorly clad, they have a *superb* consolation in walking upon magnificent causeways: the new road is 50 feet wide, and 50 more digged away or destroyed to make it.

The vintage itself can hardly be such a scene of activity and animation as this universal one of treading out the corn, with which all the towns and villages in Languedoc are now alive. The corn is all roughly stacked around a dry firm spot, where great numbers of mules and horses are driven on a trot round a centre, a woman holding the reins, and another, or a girl or two, with whips drive; the men supply and clear the floor; other parties are dressing, by throwing the corn into the air for the wind to blow away the chaff. Every soul is employed, and with such an air of cheerfulness, that the people seem as well pleased with their labour, as the farmer himself with his great heaps of wheat. The scene is uncommonly animated and joyous. I stopped and alighted often to see their method; I was always very civilly treated, and my wishes for a good price for the farmer, and not too good a one for the poor, well received. This method, which entirely saves barns, depends absolutely on climate: from my leaving Bagnere de Luchon to this moment, all through Catalonia, Roussillon, and this part of Languedoc, there has been nothing like rain; but one unvarying clear bright sky and burning sun, yet not at all suffocating, or to me even unpleasant. I asked whether they were not sometimes caught in the rain? they said, very rarely indeed; but if rain did come, it is seldom more than a heavy shower, which a hot sun quickly succeeds and dries every thing speedily.

The canal of Languedoc is the capital feature of all this country. The mountain through which it pierces is insulated, in the midst of an extended valley, and only half a mile from the road. It is a noble and stupendous work, goes through the hill about the breadth of three toises, and was digged without shafts.

Leave the road, and crossing the canal, follow it to Beziers; nine sluice-gates let the water down the hill to join the river at the town.—A noble work! The port is broad enough for four large vessels to lie abreast; the greatest of them carries from 90 to 100 tons. Many of them were at the quay, some in motion, and every sign of an animated business. This is the best sight I have seen in France. Here Louis XIV. thou art truly great!—Here, with a generous and benignant hand, thou dispensest ease and wealth to thy people!—*Si sic omnia*, thy name would indeed have been revered! To effect this noble work, of uniting the two seas, less money was expended than to besiege Turin, or to seize Strasbourg like a robber. Such an employment of the revenues of a great kingdom is the only laudable way of a monarch's acquiring immortality; all other means make their names survive with those only of the incendiaries, robbers, and violators of mankind. The canal passes through the river for about half a league, separated from it by walls which are covered in floods; and then turns off for Cette. Dine at Beziers. Knowing that Mons. l'Abbé Rozier, the celebrated editor of the *Journal Physique*, and who is now publishing a dictionary of husbandry, which in France has much reputation, lived and farmed near Beziers, I enquired at the inn the way to his house. They told me that he had left Beziers two years, but that the house was to be seen from the street, and accordingly they shewed it me from something of a square open on one side to the country; adding, that it belonged now to a Mons. de Rieupe, who had purchased the estate of the Abbé. To view the farm of a man celebrated for his writings, was an object, as it would at least enable me, in reading his book, to understand better the allusions he might make to the soil, situation, and other circumstances. I was sorry to hear, at the table d'hôte, much ridicule thrown on the Abbé Rozier's husbandry, that it had *beaucoup de fantaisie mais rien solide*; in particular, they treated his paving his vineyards as a ridiculous circumstance. Such an experiment seemed remarkable, and I was glad to hear of it, that I might desire to see these paved vineyards. The Abbé here, as a farmer, has just that character which every man will be sure to have who departs from the methods of his neighbours; for it is not in the nature of countrymen, that any body should come among them who can presume with impunity to think for himself. I asked why he left the country? and they gave me a curious anecdote of the bishop of Beziers cutting a road through the Abbé's farm, at the expence of the province, to lead to the house of his (the bishop's) mistress, which occasioned such a quarrel, that Mons. Rozier could stay no longer in the country. This is a pretty feature of a government: that a man is to be forced to sell his estate, and driven out of a country, because bishops make love—I suppose to their neighbours wives, as no other love is fashionable in France. Which of my neighbours

hours wives will tempt the bishop of Norwich to make a road through my farm, and drive me to sell Bradfield?—I give my authority for this anecdote, the chat of a table d'hôte: it is as likely to be false as true; but Languedocian bishops are certainly not English ones.—Mons. de Rieuſe received me politely, and ſatisfied as many of my enquiries as he could; for he knew little more of the Abbé's huſbandry than common report, and what the farm itſelf told him. As to paved vineyards, there was no ſuch thing: the report muſt have taken riſe from a vineyard of Burgundy grapes, which the Abbé planted in a new manner; he ſet them in a curved form, in a ſoſs, covering them only with flints inſtead of earth; this ſucceeded well. I walked over the farm, which is beautifully ſituated, on the ſlope and top of a hill, which commands Beziers, its rich vale, its navigation, and a fine accompaniment of mountains.

Beziers has a fine promenade; and is becoming, they ſay, a favourite reſidence for the Engliſh, preferring the air to that of Montpellier. Take the road to Pezenas. It leads up a hill, which commands, for ſome time, a view of the Mediterranean. Through all this country, but particularly in the olive grounds, the cricket (*cicala*) makes a conſtant, ſharp, monotonous noiſe; a more odious companion on the road can hardly be imagined. Pezenas opens on a very fine country, a vale of fix or eight leagues extent all cultivated; a beautiful mixture of vines, mulberries, olives, towns, and ſcattered houſes, with a great deal of fine lucerne; the whole bounded by gentle hills, cultivated to their tops.—At ſupper, at the table d'hôte, we were waited on by a female without ſhoes or ſtockings, exquisitely ugly, and diffuſing odours not of roſes: there were, however, a croix de St. Louis, and two or three mercantile-looking people, who prated with her very familiarly: at an ordinary of farmers, at the pooreſt and remotest market village in England, ſuch an animal would not be allowed by the landlord to enter his houſe; or by the gueſts their room.—32 miles.

The 25th. The road, in croſſing a valley to and from a bridge, is a magnificent walled cauſeway, more than a mile long, ten yards wide, and from eight to twelve feet high; with ſtone poſts on each ſide at every fix yards—a prodigious work.—I know nothing more ſtriking to a traveller than the roads of Languedoc: we have not in England a conception of ſuch exertions; they are ſplendid and ſuperb; and if I could free my mind of the recollection of the unjuſt taxation which pays them, I ſhould travel with admiration at the magnificence diſplayed by the States of this province. The police of theſe roads is however execrable—for I ſcarcely meet a cart but the driver is aſleep in it.

Taking the road to Montpellier, paſs through a pleaſing country; and by another immense walled cauſeway, twelve yards broad and three high, leading cloſe to the ſea. To Gigean, near Frontignan and Montbaſin, famous for their muſcat wines.—Approach Montpellier; the environs, for near a league, are delicious, and

and more highly ornamented than any thing I have seen in France.—Villas well built, clean, and comfortable, with every appearance of wealthy owners, are spread thickly through the country. They are, in general, pretty square buildings; some very large. Montpellier, with the air rather of a great capital than of a provincial town, covers a hill that swells proudly to the view.—But on entering it, you experience a disappointment from narrow, ill-built, crooked streets, but full of people, and apparently alive with business; yet there is no considerable manufacture in the place; the principal are verdigrease, silk handkerchiefs, blankets, perfumes, and *liqueurs*. The great object for a stranger to view is the promenade, or square, for it partakes of both, called the Perou.—There is a magnificent aqueduct on three tiers of arches for supplying the city with water, from a hill at a considerable distance; a very noble work; a *chateau d'eau* receives the water in a circular basin, from which it falls into an external reservoir, to supply the city, and the *jets d'eau* that cool the air of a garden below, the whole in a fine square considerably elevated above the surrounding ground, walled in with a balustrade, and other mural decorations, and in the centre a good equestrian statue of Louis XIV. There is an air of real grandeur and magnificence in this useful work, that struck me more than any thing at Versailles. The view is also singularly beautiful. To the south, the eye wanders with delight over a rich vale, spread with villas, and terminated by the sea. To the north, a series of cultivated hills. On one side, the vast range of the Pyrenees trend away till lost in remoteness. On the other, the eternal snows of the Alps pierce the clouds. The whole view one of the most stupendous to be seen, when a clear sky approximates these distant objects.—32 miles.

The 26th. The fair of Beaucaire fills the whole country with business and motion; meet many carts loaded; and nine diligences going or coming. Yesterday and to-day the hottest I ever experienced; we had none like them in Spain—the flies much worse than the heat.—30 miles.

The 27th. The amphitheatre of Nîmes is a prodigious work, which shews how well the Romans had adapted these edifices to the abominable uses to which they were erected. The convenience of a theatre that could hold 17000 spectators without confusion; the magnitude; the massive and substantial manner in which it is built without mortar, that has withstood the attacks of the weather, and the worse depredations of the barbarians in the various revolutions of sixteen centuries, all strike the attention forcibly.

I viewed the Maison Quarré last night; again this morning, and twice more in the day; it is beyond all comparison the most light, elegant, and pleasing building I ever beheld. Without any magnitude to render it imposing; without any extraordinary magnificence to surprize, it rivets attention. There is a magic harmony in the proportions that charms the eye. One can fix on no particular

particular part of pre-eminent beauty; it is one perfect whole of symmetry and grace. What an infatuation in modern architects, that can overlook the chaste and elegant simplicity of taste, manifest in such a work, and yet rear such piles of laboured foppery and heaviness as are to be met with in France! The temple of Diana, as it is called, and the ancient baths, with their modern restoration, and the promenade, form part of the same scene, and are magnificent decorations of the city. I was, in relation to the baths, in ill luck, for the water was all drawn off, in order to clean them and the canals.—The Roman pavements are singularly beautiful, and in high preservation. My quarters at Nîmes were at the Louvre, a large, commodious, and excellent inn—the house was almost as much a fair from morning to night as Beaucaire itself could be. I dined and supped at the table d'hôte; the cheapness of these tables suits my finances, and one sees something of the manners of the people; we sat down from twenty to forty at every meal, most motley companies of French, Italians, Spaniards, and Germans, with a Greek and Armenian; and I was informed, that there is hardly a nation in Europe or Asia, that has not merchants at this great fair, chiefly for raw silk, of which many millions in value are sold in four days: all the other commodities of the world are to be found there.

One circumstance I must remark on this numerous table d'hôte, because it has struck me repeatedly, which is the taciturnity of the French. I came to the kingdom expecting to have my ears constantly fatigued with the infinite volubility and spirits of the people, of which so many persons have written, sitting, I suppose, by their English fire-sides. At Montpellier, though 15 persons and some of them ladies were present, I found it impossible to make them break their inflexible silence with more than a monosyllable, and the whole company sat more like an assembly of tongue-tied quakers, than the mixed company of a people famous for loquacity. Here also, at Nîmes, with a different party at every meal it is the same; not a Frenchman will open his lips. To-day at dinner, hopeless of that nation, and fearing to lose the use of an organ they had so little inclination to employ, I fixed myself by a Spaniard, and having been so lately in his country, I found him ready to converse, and tolerably communicative; and indeed we had more conversation than thirty other persons maintained among themselves.

The 28th. Early in the morning to the Pont du Gard, through a plain covered with vast plantations of olives to the left, but much waste rocky land. At the first view of that celebrated aqueduct, I was rather disappointed, having expected something of greater magnitude; but soon found the error: I was, on examining it more nearly, convinced that it possessed every quality that ought to make a strong impression. It is a stupendous work; the magnitude, and the massive solidity of the architecture, which may probably endure two or three
H
thousand

thousand years more, united with the undoubted utility of the undertaking, to give us a high idea of the spirit of exertion which executed it for the supply of a provincial town: the surprise, however, may cease, when we consider the nations enslaved that were the workmen.—Returning to Nîmes, meet many merchants returning from the fair; each with a child's drum tied to his cloak-bag: my own little girl was too much in my head not to love them for this mark of attention to their children;—but why a drum? Have they not had enough of the military in a kingdom, where they are excluded from all the honours, respect, and emolument, that can flow from the sword?—I like Nîmes much; and if the inhabitants be at all on a par with the appearance of their city, I should prefer it for a residence to most, if not all the towns I have seen in France. The theatre, however, is a capital point, in that Montpellier is said to exceed it.—
24 miles.

The 29th. Pass six leagues of disagreeable country to Sauve. Vines and olives. The chateau of Mons. Sabbatier strikes in this wild country; he has inclosed much with dry walls, planted many mulberries and olives, which are young, thriving, and well inclosed, yet the soil is so stoney, that no earth is visible; some of his walls are four feet thick, and one of them twelve thick and five high, whence it seems, he thinks moving the stones a necessary improvement, which I much question. He has built three or four new farm-houses; I suppose he resides on this estate for improving it. I hope he does not *serve*; that no moon-shine pursuit may divert him from a conduct honourable to himself, and beneficial to his country.—Leaving Sauve, I was much struck with a large tract of land, seemingly nothing but huge rocks; yet most of it inclosed and planted with the most industrious attention. Every man has an olive, a mulberry, an almond, or a peach-tree, and vines scattered among them; so that the whole ground is covered with the oddest mixture of these plants and bulging rocks, that can be conceived. The inhabitants of this village deserve encouragement for their industry; and if I were a French minister, they should have it. They would soon turn all the deserts around them into gardens. Such a knot of active husbandmen, who turn their rocks into scenes of fertility, because I suppose THEIR OWN, would do the same by the wastes, if animated by the same omnipotent principle. Dine at St. Hyppolite, with eight protestant merchants returning home to Rouverge, from the fair of Beaucaire; as we parted at the same time, we travelled together; and from their conversation, I learned some circumstances of which I wanted to be informed; they told me also, that mulberries extend beyond Vigan, but then, and especially about Milhaud, almonds take their place, and are in very great quantities.

My Rouverge friends pressed me to pass with them to Milhaud and Rodez, assuring me, that the cheapness of their province was so great, that it would
tempt

tempt me to live some time amongst them. That I might have a house at Milhaud, of four tolerable rooms on a floor furnished, for 12 louis a-year; and live in the utmost plenty with all my family, if I would bring them over, for 100 louis a-year: that there were many families of noblesse, who subsisted on 50, and even on 25 a-year. Such anecdotes of cheapness are only curious when considered in a political light, as contributing on one hand to the welfare of individuals; and on the other, as contributing to the prosperity, wealth, and power of the kingdom; if I should meet with many such instances, and also with others directly contrary, it will be necessary to consider them more at large.—30 miles.

The 30th. Going out of Gange, I was surprised to find by far the greatest exertion in irrigation which I had yet seen in France; and then pass by some steep mountains, highly cultivated in terraces. Much watering at St. Laurence. The scenery very interesting to a farmer. From Gange, to the mountain of rough ground which I crossed, the ride has been the most interesting which I have taken in France; the efforts of industry the most vigorous; the animation the most lively. An activity has been here, that has swept away all difficulties before it, and has clothed the very rocks with verdure. It would be a disgrace to common sense to ask the cause: the enjoyment of property *must* have done it. Give a man the secure possession of a bleak rock, and he will turn it into a garden; give him a nine years lease of a garden, and he will convert it into a desert. To Montadier, over a rough mountain covered with box and lavender; it is a beggarly village, with an auberge that made me almost shrink. Some cut-throat figures were eating black bread, whose visages had so much of the gallies that I thought I heard their chains rattle. I looked at their legs, and could not but imagine they had no business to be free. There is a species of countenance so horribly bad, that it is impossible to be mistaken in one's reading. I was quite alone, and absolutely without arms. Till this moment, I had not dreamt of carrying pistols: I should now have been better satisfied, if I had had them. The master of the auberge, who seemed first cousin to his guests, procured for me some wretched bread with difficulty, but it was not black.—No meat, no eggs, no legumes, and execrable wine: no corn for my mule; no hay; no straw; no grass: the loaf fortunately was large; I took a piece, and sliced the rest for my four-footed Spanish friend, who ate it thankfully, but the aubergiste growled.—Descend by a winding and excellent road to Maudieres, where a vast arch is thrown across the torrent. Pass St. Maurice, and cross a ruined forest amongst fragments of trees. Descend three hours, by a most noble road hewn out of the mountain side to Lodeve, a dirty, ugly, ill built town, with crooked close streets, but populous, and very industrious.—Here I drank excellent light and pleasing white wine. at 5*s.* a bottle.—36 miles.

The 31st. Cross a mountain by a miserable road, and reach Beg de Rieux, which

which shares with Carcassonne, the fabric of Londrins, for the Levant trade.—Cross much waste to Beziers.—I met to-day with an instance of ignorance in a well dressed French merchant, that surprized me. He had plagued me with abundance of tiresome foolish questions, and then asked for the third or fourth time what country I was of. I told him I was a Chinese. How far off is that country?—I replied, 200 leagues. *Deux cents lieux! Diable! c'est un grand chemin!* The other day a Frenchman asked me, after telling him I was an Englishman, if we had trees in England?—I replied, that we had a few. Had we any rivers?—Oh, none at all. *Ab ma foi c'est bien triste!* This incredible ignorance, when compared with the knowledge so universally disseminated in England, is to be attributed, like every thing else, to government.—40 miles.

AUGUST 1. Leave Beziers, in order to go to Capestan by the pierced mountain. Cross the canal of Languedoc several times; and over many wastes to Pleraville. The Pyrenees now full to the left, and their roots but a few leagues off. At Carcassonne they carried me to a fountain of muddy water, and to a gate of the barracks; but I was better pleased to see several large good houses of manufacturers, that shew wealth.—40 miles.

The 2d. Pass a considerable convent, with a long line of front, and rise to Fanjour.—16 miles.

The 3d. At Mirepoix they are building a most magnificent bridge of seven flat arches, each of 64 feet span, which will cost 1,800,000 liv. (78,750l.); it has been twelve years erecting, and will be finished in two more. The weather for several days has been as fine as possible, but very hot; to-day the heat was so disagreeable, that I rested from twelve to three, at Mirepoix; and found it so burning, that it was an effort to go half a quarter of a mile to view the bridge. The myriads of flies were ready to devour me, and I could hardly support any light in the room. Riding fatigued me, and I enquired for a carriage of some sort to carry me, while these great heats should continue; I had done the same at Carcassonne; but nothing like a cabriolet of any sort was to be had. When it is recollected that that place is one of the most considerable manufacturing towns in France, containing 15,000 people, and that Mirepoix is far from being a mean place, and yet not a voiture of any kind to be had, how will an Englishman bless himself for the universal conveniences that are spread through his own country, in which I believe there is not a town of 1500 people in the kingdom where post chaises and able horses are not to be had at a moment's warning! What a contrast! This confirms the fact deducible from the little traffic on the roads even around Paris itself. Circulation is stagnant in France.—The heat was so great that I left Mirepoix disordered with it: this was by far the hottest day that I ever felt. The hemisphere seemed almost in a flame with burning rays that rendered it impossible to turn one's eyes within many degrees of the

the radiant orb that now blazed in the heavens.—Cross another fine new bridge of three arches; and come to a woodland, the first I had seen for a great distance. Many vines about Pamiers, which is situated in a beautiful vale, upon a fine river. The place itself is ugly, stinking, and ill built; with an inn! Adieu, Monf. Gascit; if fate send me to such another house as thine—be it an expiation for my sins!—28 miles.

The 4th. Upon leaving Amous, there is the extraordinary spectacle of a river issuing out of a cavern in a mountain of rock; on crossing the hill you see where it enters by another cavern.—It pierces the mountain. Most countries, however, have instances of rivers passing under ground. At St. Geronds go to the Croix Blanche, the most execrable receptacle of filth, vermin, impudence, and impo-
sition that ever exercised the patience, or wounded the feelings of a traveller. A withered hag, the dæmon of beastliness, presides there. I laid, not rested, in a chamber over a stable, whose effluvia through the broken floor were the least offensive of the perfumes afforded by this hideous place.—It could give me nothing but two stale eggs, for which I paid, exclusive of all other charges, 20/. Spain brought nothing to my eyes that equalled this sink, from which an English hog would turn with disgust. But the inns all the way from Nîmes are wretched, except at Lodeve, Gange, Carcassonne, and Mirepoix. St. Geronds must have, from its appearance, four or five thousand people. Pamiers near twice that number. What can be the circulating connection between such masses of people and other towns and countries, that can be held together and supported by such inns? There have been writers who look upon such observations as arising merely from the petulance of travellers, but it shews their extreme ignorance. Such circumstances are political data. We cannot demand all the books of France to be opened in order to explain the amount of circulation in that kingdom; a politician must therefore collect it from such circumstances as he can ascertain; and among these, traffic on the great roads, and the convenience of the houses prepared for the reception of travellers, tell us both the number and the condition of those travellers; by which term I chiefly allude to the natives, who move on business or pleasure from place to place; for if they be not considerable enough to cause good inns, those who come from a distance will not, which is evident from the bad accommodations even in the high road from Calais to Rome. On the contrary, go in England to towns that contain 1500, 2000, or 3000 people, in situations absolutely cut off from all dependence, or almost the expectation of what are properly called travellers, yet you will meet with neat inns, well dressed and clean people keeping them, good furniture, and a refreshing civility; your senses may not be gratified, but they will not be offended; and if you demand a post chaise and a pair of horses, the cost of which is not less than 80l.

in spite of a heavy tax, it will be ready to carry you whither you please. Are no political conclusions to be drawn from this amazing contrast? It proves that such a population in England have connections with other places to the amount of supporting such houses. The friendly clubs of the inhabitants, the visits of friends and relations, the parties of pleasure, the resort of farmers, the intercourse with the capital and with other towns, form the support of good inns; and in a country where they are not to be found, it is a proof that there is not the same quantity of motion; or that it moves by means of less wealth, less consumption, and less enjoyment. In this journey through Languedoc, I have passed an incredible number of splendid bridges, and many superb causeways. But this only proves the absurdity and oppression of government. Bridges that cost 70 or 80,000*l.* and immense causeways to connect towns, that have no better inns than such as I have described, appear to be gross absurdities. They cannot be made for the mere use of the inhabitants, because one-fourth of the expence would answer the purpose of real utility. They are therefore objects of public magnificence, and consequently for the eye of travellers. But what traveller, with his person surrounded by the beggarly filth of an inn, and with all his senses offended, will not condemn such inconsistencies, and will not wish for more comfort and less appearance of splendour? —30 miles.

The 5th. To St. Martory is an almost uninterrupted range of well inclosed and well cultivated country.—For an hundred miles past, the women generally without shoes, even in the towns; and in the country many men also.—The heat yesterday and to-day as intense as it was before: there is no bearing any light in the rooms; all must be shut close, or none are tolerably cool: in going out of a light room into a dark one, though both to the north, there is a very sensible coolness; and out of a dark one into a roofed balcony, is like going into an oven. I have been advised every day not to stir till four o'clock. From ten in the morning till five in the afternoon, the heat makes all exercise most uncomfortable; and the flies are a curse of Egypt. Give me the cold and fogs of England, rather than such a heat, should it be lasting. The natives, however, assert, that this intensity has now continued as long as it commonly does, namely, four or five days; and that the greatest part even of the hottest months is much cooler than the weather is at present.—In 250 miles distant, I have met on the road two cabriolets only, and three miserable things like old English one-horse chaises; not one gentleman; though many merchants, as they call themselves, each with two or three cloak-bags behind him:—a scarcity of travellers that is amazing.—28 miles.

The 6th. To Bagnere de Luchon, rejoining my friends, and not displeased to have a little rest in the cool mountains, after so burning a ride.—28 miles.

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The 10th. Finding our party not yet ready to set out on their return to Paris, I determined to make use of the time there was yet to spare, ten or eleven days, in a tour to Bagnere de Bigorre, to Bayonne, and to meet them on the way to Bourdeaux, at Auch. This being settled, I mounted my English mare, and took my last leave of Luchon.—28 miles.

The 11th. Pass a convent of Bernardine monks, who have a revenue of 30,000 liv. It is situated in a vale, watered by a charming chrystal stream, and some hills, covered with oak, shelter it behind.—Arrive at Bagnere, which contains little worthy of notice, but it is much frequented by company on account of its waters. To the valley of Campan, of which I had heard great things, and which yet much surpassed my expectation. It is quite different from all the other vales I have seen in the Pyrenees or in Catalonia. The features and the arrangement novel. In general the richly cultivated slopes of those mountains are thickly inclosed; this, on the contrary, is open. The vale itself is a flat range of cultivation and watered meadow, spread thickly with villages and scattered houses. The eastern boundary is a rough, steep, and rocky mountain, and affords pasturage to goats and sheep; a contrast to the western, which forms the singular feature of the scene. It is one noble sheet of corn and grass uninclosed, and intersected only by lines that mark the division of properties, or the channels that conduct water from the higher regions for irrigating the lower ones; the whole is one matchless slope of the richest and most luxuriant vegetation. Here and there are scattered some small masses of wood, which chance has grouped with wonderful happiness for giving variety to the scene. The season of the year, by mixing the rich yellow of ripe corn with the green of the watered meadows, added greatly to the colouring of the landscape, which is upon the whole the most exquisite for *form* and *colour* that my eye has ever been regaled with.—Take the road to Lourde, where is a castle on a rock, garrisoned for the mere purpose of keeping state prisoners, sent hither by *lettres de cachet*. Seven or eight are *known* to be here at present; thirty have been here at a time; and many for life—torn by the relentless hand of jealous tyranny from the bosom of domestic comfort; from wives, children, friends, and hurried for crimes unknown to themselves—more probably for virtues—to languish in this detested abode of misery—and die of despair. Oh, liberty! liberty!—and yet this is the mildest government of any considerable country in Europe, our own excepted. The dispensations of providence seem to have permitted the human race to exist only as the prey of tyrants, as it has made pigeons for the prey of hawks.—35 miles.

The 12th. Pau is a considerable town, that has a parliament and a linen manufacture; but it is more famous for being the birth-place of Henry IV.

I viewed

I viewed the castle, and was shewn, as all travellers are, the room in which that amiable prince was born, and the cradle, the shell of a tortoise, in which he was nursed. What an effect on posterity have great and distinguished talents ! This is a considerable town, but I question whether any thing would ever carry a stranger to it but its possessing the cradle of a favourite character.

Take the road to Moneng, and come presently to a scene which was so new to me in France, that I could hardly believe my own eyes. A succession of many well built, tight, and COMFORTABLE farming cottages, built of stone, and covered with tiles ; each having its little garden, inclosed by clipt thorn edges, with plenty of peach and other fruit-trees, some fine oaks scattered in the hedges, and young trees nursed up with so much care, that nothing but the fostering attention of the owner could effect any thing like it. To every house belongs a farm, perfectly well inclosed, with grafs borders mown and neatly kept around the corn fields, with gates to pass from one inclosure to another. The men are all dressed with red caps, like the highlanders of Scotland. There are some parts of England (where small yeomen still remain) that resemble this country of Bearne ; but we have very little that is equal to what I have seen in this ride of twelve miles from Pau to Moneng. It is all in the hands of little proprietors, without the farms being so small as to occasion a vicious and miserable population. An air of neatness, warmth, and comfort breathes over the whole. It is visible in their new built houses and stables ; in their little gardens ; in their hedges ; in the courts before their doors ; even in the coops for their poultry, and the sties for their hogs. A peasant does not think of rendering his pig comfortable, if his own happiness hang by the thread of a nine years lease. We are now in Bearne, within a few miles of the cradle of Henry IV. Do they inherit these blessings from that good prince ? The benignant genius of that good monarch seems to reign still over the country ; each peasant has *the fowl in the pot*.—34 miles.

The 13th. The agreeable scene of yesterday continues ; many small properties ; and every appearance of rural happiness. Navareen is a small walled and fortified town, consisting of three principal streets, which cross at right angles, with a small square. From the ramparts there is the view of a fine country. The linen fabric spreads through it. To St. Palais the country is mostly inclosed, and much of it with thorn-hedges, admirably trained, and kept neatly clipped.—25 miles.

The 14th. Left St. Palais, and took a guide to conduct me four leagues to Anspan. Fair day, and the place crouded with farmers ; I saw the soup prepared for what we should call the farmer's ordinary. There was a mountain of sliced bread, the colour of which was not inviting ; ample provision of cabbage, greafe, and

and water, and about as much meat for some scores of people, as half a dozen English farmers would have eaten, and grumbled at their host for short commons.—26 miles.

The 15th. Bayonne is by much the prettiest town I have seen in France; the houses are not only well built of stone, but the streets are wide, and there are many openings which, though not regular squares, have a good effect. The river is broad, and many of the houses being fronted to it, the view of them from the bridge is fine. The promenade is charming; it has many rows of trees, whose heads join and form a shade delicious in this hot climate. In the evening, it was thronged with well dressed people of both sexes: and the women, through all the country, are the handsomest I have seen in France. In coming hither from Pau, I saw what is very rare in that kingdom, clean and pretty country girls; in most of the provinces, hard labour destroys both person and complexion. The bloom of health on the cheeks of a well dressed country girl is not the worst feature in any landscape. I hired a chaloup for viewing the embarkment at the mouth of the river. By the water spreading itself too much, the harbour was injured; and government, to contract it, has built a wall on the north bank a mile long, and another on the south shore of half in length. It is from ten to twenty feet wide, and about twelve high, from the top of the base of rough stone, which extends twelve or fifteen feet more. Towards the mouth of the harbour, it is twenty feet wide, and the stones on both sides cramp together with irons. They are now driving piles of pine 16 feet deep, for the foundation. It is, on the whole, a work of great expence, magnificence, and utility.

The 16th. To Dax is not the best way to Auch, but I had a mind to see the famous waste called *Les Landes de Bourdeaux*, of which I had long heard and read so much. I was informed, that by this route, I should pass through more than twelve leagues of them. They reach almost to the gates of Bayonne; but broken by cultivated spots for a league or two. These *landes* are sandy tracts covered with pine trees, cut regularly for resin. Historians report, that when the Moors were expelled from Spain, they applied to the court of France for leave to settle on and cultivate these *landes*; and that the court was much condemned for refusing them. It seems to have been taken for granted, that they could not be peopled with French; and therefore ought rather to be given to Moors, than to be left waste.—At Dax, there is a remarkably hot spring in the middle of the town. It is a very fine one, bubbling powerfully out of the ground in a large basin, walled in; it is boiling hot; it tastes like common water, and I was told that it was not impregnated with any mineral. The only use to which it is applied is for washing linen. It is at all seasons of the same heat, and in the same quantity.—27 miles.

The 17th. Pass a district of sand as white as snow, and so loose as to blow; yet it has oaks two feet in diameter, by reason of a bottom of white adhesive earth like marl. Pass three rivers, the waters of which might be applied in irrigation, yet no use made of them. The Duke de Bouillon has vast possessions in these lands. A Grand Seigneur will at any time, and in any country, explain the reason of improveable land being left waste.—29 miles.

The 18th. As dearth is, in my opinion, the general feature of all money exchanges in France, it is but candid to note instances to the contrary. At Airé, they gave me, at the Croix d'Or, soup, eels, sweet-bread, and green-peas; a pigeon, a chicken, and veal-cutlets, with a dessert of biscuits, peaches, nectarines, plumbs, and a glass of *liqueur*, with a bottle of good wine, all for 40s. (20d.) oats for my mare 20s. and hay 10s. At the same price at St. Severe, I had a supper last night not inferior to it. Every thing at Airé seemed good and clean; and what is very uncommon, I had a parlour to eat my dinner in, and was attended by a neat well dressed girl. The last two hours to Airé it rained so violently, that my silk furtout was an insufficient defence; and the old landlady was in no haste to give me fire enough to be dried.—35 miles.

The 19th. Pass Beek, which seems a flourishing little place, if we may judge by the building of new houses. The Clef d'Or is a large, new, and good inn.

In the 270 miles, from Bagnere de Luchon to Auch, a general observation I may make is, that the whole, with very few exceptions, is inclosed; and that the farm-houses are every where scattered, instead of being, as in many parts of France, collected in towns. I have seen scarcely any gentlemen's country-seats that seem at all modern; and, in general, they are thin to a surprising degree. I have not met with one country equipage, nor any thing like a gentleman riding to see a neighbour. Scarcely a gentleman at all. At Auch, met by appointment my friends, on their return to Paris. The town is almost without manufactures or commerce, and is supported chiefly by the rents of the country. But they have many of the noblesse in the province, too poor to live here; some indeed so poor, that they plough their own fields; and these may possibly be much more estimable members of society, than the fools and knaves who laugh at them.—31 miles.

The 20th. Pass Fleuran, which contains many good houses, and go through a populous country to Leitour, a bishoprick, the diocesan of which we left at Bagnere de Luchon. The situation is beautiful on the point of a ridge of hills.—20 miles.

The 22d. By Leyrac, through a fine country, to the Garonne, which we cross by a ferry. This river is here a quarter of a mile broad, with every appearance of commerce. A large barge passed loaded with cages of poultry; of such consequence throughout the extent of this navigation is the consumption of the
great

great city of Bordeaux! The rich vale continues to Agen, and is very highly cultivated; but has not the beauty of the environs of Leitour. If new buildings be a criterion of the flourishing state of a place, Agen prospers. The bishop has raised a magnificent palace, the centre of which is in a good taste; but the junction with the wings not equally happy.—23 miles.

The 23d. Pass a rich and highly cultivated vale to Aguillon; much hemp, and every woman in the country employed on it. Many neat well built farm-houses on small properties, and all the country very populous. View the chateau of the Duc 'Aguillon, which, being in the town, is badly situated, according to all rural ideas; but a town is ever an accompaniment of a chateau in France, as it was formerly in most parts of Europe; it seems to have resulted from a feudal arrangement, that the Grand Seigneur might keep his slaves the nearer to his call, as a man builds his stables near his house. This edifice is a considerable one, built by the present Duke; begun about twenty years ago, when he was exiled here during eight years. And, thanks to that banishment, the building went on nobly; the body of the house done, and the detached wings almost finished. But as soon as the sentence was reversed, the Duke went to Paris, and has not been here since, consequently all now stands still. It is thus that banishment alone will force the French nobility to execute what the English do for pleasure—reside upon and adorn their estates. There is one magnificent circumstance, namely, an elegant and spacious theatre; it fills one of the wings. The orchestra is for twenty-four musicians, the number kept, fed, and paid, by the Duke when here. This elegant and agreeable luxury, which falls within the compass of a very large fortune, is known in every country in Europe except England: the possessors of great estates here preferring horses and dogs very much before any entertainment a theatre can yield. To Tonnance.—25 miles.

The 24th. Many new and good country seats of gentlemen, well built, and set off with gardens, plantations, &c. These are the effects of the wealth of Bordeaux. These people, like other Frenchmen, eat little meat; in the town of Leyrac five oxen only are killed in a year; whereas an English town with the same population would consume two or three oxen a week. A noble view towards Bordeaux for many leagues, the river appearing in four or five places. Reach Languon, and drink of its excellent white wine.—32 miles.

The 25th. Pass through Barsac, famous also for its wines. They are now ploughing with oxen between the rows of the vines, the operation which gave Tull the idea of horse-hoeing corn. Great population, and country seats all the way. At Castres the country changes to an uninteresting flat. Arrive at Bordeaux, through a continued village.—30 miles.

The 26th. Much as I had read and heard of the commerce, wealth, and magnificence of this city, they greatly surpassed my expectations. Paris did not

answer at all, for it is not to be compared to London; but we must not name Liverpool in competition with Bourdeaux. The grand feature here, of which I had heard most, answers the least; I mean the quay, which is respectable only for length, and its quantity of business, neither of which, to the eye of a stranger, is of much consequence, if devoid of beauty. The row of houses is regular, but without either magnificence or beauty. It is a dirty, sloping, muddy shore; parts without pavement, incumbered with filth and stones; barges lie here for loading and unloading the ships, which cannot approach to what should be a quay. Here is all the dirt and disagreeable circumstances of trade, without the order, arrangement, and magnificence of a quay. Barcelona is unique in this respect. When I presumed to find fault with the buildings on the river, it must not be supposed that I include the whole; the crescent which is in the same line is better. The *place royale*, with the statue of Louis XV. in the middle, is a fine opening, and the buildings which form it regular and handsome. But the quarter of the *chapeau rouge* is truly magnificent, consisting of noble houses, built, like the rest of the city, of white hewn stone. It joins the *chateau trompette*, which occupies near half a mile of the shore. This fort is bought of the king, by a company of speculators, who are now pulling it down with an intention of building a fine square and many new streets, to the amount of 1800 houses. I have seen a design of the square and the streets, and it would, if executed, be one of the most splendid additions to a city that is to be seen in Europe. This great work stands still at present through a fear of resumptions. The theatre, built about ten or twelve years ago, is by far the most magnificent in France. I have seen nothing that approaches it. The building is insulated; and fills up a space of 306 feet by 165, one end being the principal front, containing a portico the whole length of it, of twelve very large Corinthian columns. The entrance from this portico is by a noble vestibule, which leads not only to the different parts of the theatre, but also to an elegant oval concert-room and saloons for walking and refreshments. The theatre itself is of a vast size; in shape the segment of an oval. The establishment of actors, actresses, singers, dancers, orchestra, &c. speaks the wealth and luxury of the place. I have been assured, that from thirty to fifty louis a night have been paid to a favourite actress from Paris. Larrive, the first tragic actor of that capital, is now here, at 500 liv. (21l. 12s. 6d.) a night, with two benefits. Dauberval, the dancer, and his wife (the Mademoiselle Theodore of London) are retained as principal ballet-master and first female dancer, at a salary of 28,000 liv. (1225l.). Pieces are performed every night, Sundays not excepted, as every where in France. The mode of living that takes place here among merchants is highly luxurious. Their houses and establishments are on expensive scales. Great entertainments, and many served

on plate: high play is a much worse thing;—and the scandalous chronicle speaks of merchants keeping the dancing and singing girls of the theatre at salaries which ought to import no good to their credit. This theatre, which does so much honour to the pleasures of Bourdeaux, was raised at the expence of the town, and cost 270,000*l*. The new tide corn mill, erected by a company, is very well worth viewing. A large canal is digged and formed in masonry of hewn stone, the walls four feet thick, leading under the building for the tide coming in, to turn the water wheels. It is then conducted in other equally well formed canals to a reservoir; and when the tide returns it gives motion to the wheels again. Three of these canals pass under the building for containing 24 pairs of stones. Every part of the work is on a scale of solidity and duration, admirably executed. The estimate of the expence is 8,000,000 *liv*. (350,000*l*.); but I know not how to credit such a sum. How far the erection of steam engines to do the same business would have been found a cheaper method, I shall not enquire; but I should apprehend that the common water mills, on the Garonne, which start without such enormous expences for their power, must in the common course of events ruin this company. The new houses, that are building in all quarters of the town, mark, too clearly to be misunderstood, the prosperity of the place. The skirts are every where composed of new streets; with still newer ones marked out, and partly built. These houses are in general small, or on a middling scale, for inferior tradesmen. They are all of white stone, and add, as they are finished, much to the beauty of the city. I enquired into the date of these new streets, and found that four or five years were in general the period: that is to say, since the peace; and from the colour of the stone of those streets next in age, it is plain that the spirit of building was at a stop during the war. Since the peace they have gone on with great activity. What a satire on the government of the two kingdoms, to permit in one the prejudices of manufacturers and merchants, and in the other the insidious policy of an ambitious court, to hurry the two nations into wars that check beneficial works, and spread ruin where private exertion was busied in deeds of prosperity! The rent of houses and lodgings rises every day; they complain that the expences of living have increased in ten years full 30 per cent.—There can hardly be a clearer proof of an advance in prosperity.

The commercial treaty with England being a subject too interesting not to demand attention, we made the necessary enquiries.—Here it is considered as a wise measure, that tends equally to the benefit of both countries.

We went twice to see Larrive perform his two capital parts of the Black Prince in Monf. du Belloy's *Pierre le Cruel*, and *Philoctete*, which gave me a very high idea of the French theatre. The inns at this city are excellent; the hotel d'Angleterre and the Prince of Asturias; at the latter we found every accommodation

commodation to be wished, but with an inconsistency that cannot be too much condemned: we had very elegant apartments, and were served on plate, yet the necessary-house the same temple of abomination that is to be met in a dirty village.

The 28th. Leave Bourdeaux;—cross the river by a ferry, which employs twenty-nine men and fifteen boats, and lets at 18,000 liv. (787l.) a year. The view of the Garonne is very fine, appearing twice as broad as the Thames at London; and the number of large ships lying in it, makes it, I suppose, the *richest* water view that France has to boast. Hence to the Dordonne, a noble river, though much inferior to the Garonne; the ferry lets at 6000 liv. Reach Cagnac. —20 miles.

The 29th. To Barbesieux, situated in a beautiful country, finely diversified and wooded; the marquisate of which, with the chateau, belongs to the Duke de la Rochefoucauld, whom we met here; he inherits this estate from the famous Louvois, the minister of Louis XIV. In these thirty-seven miles of country, lying between the great rivers Garonne, Dordonne, and Charente, and consequently in one of the best parts of France for markets, the quantity of waste land is surprising; it is indeed the predominant feature. Much of these wastes belonged to the prince de Soubise, who would not sell any part of them. Thus it is whenever you stumble on a Grand Seigneur, even one who was worth millions, you are sure to find his property a desert. The Duke of Bouillon's and this Prince's are two of the greatest properties in France; and all the signs I have yet seen of their greatness, are wastes, *landes*, deserts, fern, ling—Go to their residence, wherever it may be, and you would probably find them in the midst of a forest, very well peopled with deer, wild boars, and wolves. Oh! if I were the legislator of France for a day, I would make such great lords skip! * We supped with the Duke de la Rochefoucauld; the provincial assembly of Saintonge is soon to meet, and this nobleman, being the president, is waiting for their assembling.

The 30th. Through a chalk country, well wooded, though without inclosures, to Angoulême; the approach to that town is fine; the country around being beautiful with the fine river Charente, here navigable, flowing through it. —25 miles.

The 31st. Quitting Angoulême, pass through a country almost covered with vines, and across a noble wood belonging to the Duchess d'Anville, mother of the Duke de la Rochefoucauld, to Verteul, a chateau of the same Lady, built in 1459, where we found every thing that travellers could wish in a hospitable

* I can assure the reader that these sentiments were those of the moment; the events that have taken place almost induced me to strike many such passages out, but it is fairer to all parties to leave them.

manſion. The Emperor Charles V. was entertained here by Anne de Polignac, widow of Francis II. Count de la Rochefoucauld, and that Prince, ſaid aloud, *n'avoir jamais été en maiſon qui ſentit mieux ſa grande vertu bonnêteté & ſeigneurie que celle la.*—It is excellently kept; in thorough repair, fully furniſhed, and all in order, which merits praiſe, conſidering that the family rarely are here for more than a few days in a year, having many other and more conſiderable ſeats in different parts of the kingdom. If this juſt attention to the intereſts of poſterity were more general, we ſhould not ſee the melancholy ſpectacle of ruined chateaus in ſo many parts of France. In the gallery is a range of portraits from the tenth century; by one of which it appears, that this eſtate came by a Mademoiſelle la Rochefoucauld, in 1470. The park, woods, and river Charente here are fine: the laſt abounds greatly in carp, tench and perch. It is at any time eaſy to get from 50 to 100 brace of fiſh that weigh from three to 10 lb. each: we had a brace of carp for ſupper, the ſweeteſt, without exception, I ever taſted. If I pitched my tent in France, I ſhould chooſe it to be by a river that gave ſuch fiſh. Nothing provokes one ſo much in a country reſidence as a lake, a river, or the ſea within view of the windows, and a dinner every day without fiſh, which is ſo common in England.—27 miles.

SEPTEMBER 1ſt. Paſs Caudec, Ruffec, Maisons-Blanches, and Chaunay. At the firſt of theſe places, view a very fine flour-mill built by the late Count de Broglie, brother of the Marechal de Broglie, one of the ableſt and moſt active officers in the French ſervice. In his private capacity, his undertakings were of a national kind; this mill, an iron forge, and the project of a navigation, proved, that he had a diſpoſition for every exertion that could, according to the prevalent ideas of the times, benefit his country; that is to ſay, in every way except the one in which it would have been effective—practical agriculture. This day's journey has been, with ſome exceptions, through a poor, dull, and diſagreeable country.—35 miles.

The 2d. Poitou, from what I ſee of it, is an unimproved, poor, and ugly country. It ſeems to want communication, demand, and activity of all kinds; nor does it, on an average, yield the half of what it might. The lower part of the province is much richer and better. Arrive at Poitiers, which is one of the worſt built towns I have ſeen in France; very large and irregular, and containing ſcarcely any thing worthy of notice, except the cathedral, which is well built, and very well kept. The fineſt thing by far in the town is the promenade, which is the moſt extenſive I have ſeen; it occupies a conſiderable ſpace of ground, with gravelled walks, &c. excellently kept:—12 miles.

The 3d. A white chalky country to Chateaurault, open, and thinly peopled, though not without country-ſeats. That town has ſome animation, by reaſon
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of its navigable river, which falls into the Loire. There is a considerable cutlery manufacture: we were no sooner arrived, than our apartment was full of the wives and daughters of manufacturers, each with her box of knives, scissars, toys, &c. and with so much civil solicitude to have something bought, that had we wanted nothing it would have been impossible to let so much urgency prove vain. It is remarkable, as the fabrics made here are cheap, that there is scarcely any division of labour in this manufacture; it is in the hands of distinct and unconnected workmen, who go through every branch on their own account, and without assistance, except from their families.—25 miles.

The 4th. Pass a better country, with many chateaus, to Les Ormes, where we stopt to see the seat built by the late Count de Voyer d'Argenson. This chateau is a large handsome edifice of stone, with two very considerable wings for offices and strangers' apartments: the entrance is into a neat vestibule, at the end of which is the saloon, a circular marble room, extremely elegant and well furnished: in the drawing-room are paintings of the four French victories of the war of 1744: in every apartment there is a strong disposition to English furniture and modes. This pleasing residence belongs at present to the Count d'Argenson. The late Count who built it formed with the present Duke of Grafton, in England, the scheme of a very agreeable party. The Duke was to go over with his horses and pack of fox-hounds, and live here for some months, with a number of friends. It originated in the proposal to hunt French wolves with English fox-dogs. Nothing could be better planned than the scheme, for Les Ormes is large enough to have contained a numerous party; but the Count's death destroyed the plan. This is a sort of intercourse between the nobility of two kingdoms, which I am surprised does not take place sometimes; it would vary the common scenes of life very agreeably, and be productive of some of the advantages of travelling in the most eligible way.—23 miles.

The 5th. Through a dead flat and unpleasant country, but on the finest road I have seen in France—nor does it seem possible that any should be finer; not arising from great exertions, as in Languedoc, but from being laid flat with admirable materials. Chateaus are scattered every where in this part of Touraine; but farm houses and cottages thin, till you come in sight of the Loire, the banks of which seem one continued village. The vale, through which that river flows, may be three miles over; a dead level of burnt ruflet meadow.

The entrance of Tours is truly magnificent, by a new street of large houses, built of hewn white stone, with regular fronts. This fine street, which is wide, and with foot pavements on each side, is cut in a strait line through
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the whole city to the new bridge, of fifteen flat arches, each of seventy-five feet span. It is altogether a noble exertion for the decoration of a provincial town. Some houses remain yet to be built, the fronts of which are done; some reverend fathers are satisfied with their old habitations, and do not choose the expence of filling up the elegant design of the Tours projectors; they ought, however, to be unroofed if they will not comply, for fronts without houses behind them have a ridiculous appearance. From the tower of the cathedral there is an extensive view of the adjacent country; but the Loire, for so considerable a river, and for being boasted as the most beautiful in Europe, exhibits such a breadth of shoals and sands as to be almost subversive of beauty. In the chapel of the old palace of Louis XI. Les Pleffis les Tours, are three pictures which deserve the traveller's notice; a holy family, St. Catharine, and the daughter of Herod; they seem to be of the best age of Italian art. There is a very fine promenade here; long and admirably shaded by four rows of noble and lofty elms, which for shelter against a burning sun can have no superior; parallel with it is another on the rampart of the old walls, which looks down on the adjacent gardens; but these walks, of which the inhabitants have long boasted, are at present objects of melancholy; the corporation has offered the trees to sale, and I was assured they would be cut down the ensuing winter.—One would not wonder at an English corporation sacrificing the ladies' walk for plenty of turtle, venison, and madeira; but that a French one should have so little gallantry, is inexcusable.

The 9th. The Count de la Rochefoucauld having a feverish complaint when he arrived here, which prevented our proceeding on the journey, it became the second day a confirmed fever; the best physician of the place was called in, whose conduct I liked much, for he had recourse to very little physick, but much attention to keep his apartment cool and airy; and seemed to have great confidence in leaving nature to throw off the malady that oppressed her. Who is it that says there is a great difference between a good physician and a bad one; yet very little between a good one and none at all?

Among other excursions, I took a ride on the banks of the Loire towards Saumur, and found the country the same as near Tours; but the chateaus not so numerous or good. Where the chalk hills advance perpendicularly towards the river, they present a most singular spectacle of uncommon habitations; for a great number of houses are cut out of the white rock, fronted with masonry, and holes cut above for chimnies, so that you sometimes know not where the house is from which you see the smoke issuing. These cavern-houses are in some places in tires one above another. Some with little scraps of gardens have a pretty effect. In general, the proprietors occupy them; but many are let at 10, 12, and 15 liv. a year. The people I talked with seemed well satisfied with
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their habitations, as good and comfortable: a proof of the dryness of the climate. In England the rheumatism would be the chief inhabitant. Walked to the Benedictine convent of Marmoutier, of which the Cardinal de Rohan, at present here, is abbot.

The 10th. Nature, or the Tours doctor, having recovered the count, we set forward on our journey. The road to Chanteloup is made on an embankment, that secures a large level tract from floods. The country more uninteresting than I could have thought it possible in the vicinity of a great river.—View Chanteloup, the magnificent seat of the late Duke de Choiseul. It is situated on a rising ground, at some distance from the Loire, which in winter, or after great floods, is a fine object, but at present is scarcely seen. The ground-floor in front consists of seven rooms: the dining-room of about thirty by twenty, and the drawing-room thirty by thirty-three: the library is seventy-two by twenty, fitted up by the present possessor, the Duke de Penthièvre, with very beautiful tapestry from the Gobelins.—In the pleasure-ground, on a hill commanding a very extensive prospect, is a Chinese pagoda, 120 feet high, built by the duke, in commemoration of the persons who visited him in his exile. On the walls of the first room in it their names are engraven on marble tablets. The number and rank of the persons do honour to the duke and to themselves. The idea was a happy one. The forest you look down on from this building is very extensive; they say eleven leagues across: ridings are cut pointing to the pagoda; and when the duke was alive, these glades had the mischievous animation of a vast hunt, supported so liberally as to ruin the master of it, and transferred the property of this noble estate and residence from his family to the last hands I should wish to see it in—a prince of the blood. Great lords love too much an environ of forest, boars, and huntsmen, instead of marking their residence by the accompaniment of neat and well cultivated farms, clean cottages, and happy peasants. In such a method of shewing their magnificence, rearing forests, gilding domes, or bidding aspiring columns rise, might be wanted; but they would have, instead of them, erections of comfort, establishments of ease, and plantations of felicity: and their harvest, instead of the flesh of boars, would be in the voice of cheerful gratitude—they would see public prosperity flourish on its best basis of private happiness.—As a farmer, there is one feature which shews the Duke de Choiseul had some merit; he built a noble cow-house; a platform leads along the middle, between two rows of mangers, with stalls for seventy-two, and another apartment, not so large, for others, and for calves. He imported 120 very fine Swiss cows, and visited them with his company every day, as they were kept constantly tied up. To this I may add the best built sheep-house I have seen in France: and I thought I saw from the pagoda part of the farm better laid out and ploughed than common in the country, so that he probably imported

imported some ploughmen.—This has merit in it; but it was all the merit of banishment. Chanteloup would neither have been built, nor decorated, nor furnished, if the duke had not been exiled. It was the same with the Duke d'Aguillon. These ministers would have abominated the country, instead of rearing such edifices, or forming such establishments, if they had not both been sent from Versailles. View the manufacture of steel at Amboise, established by the Duke de Choiseul. Vineyards the chief feature of agriculture.—37 miles.

The 11th. To Blois, an old town, prettily situated on the Loire, with a good stone bridge of eleven arches. We viewed the castle, for the historical monument it affords that has rendered it so famous. They shew the room where the council assembled, and the chimney in it before which the Duke of Guise was standing when the king's page came to demand his presence in the royal closet: the door he was entering when stabbed: the tapestry he was in the act of turning aside: the tower where his brother the cardinal suffered; with a hole in the floor into the dungeon of Louis XI. of which the guide tells many horrible stories, in the same tone, from having told them so often, in which the fellow in Westminster Abbey gives his monotonous history of the tombs. The best circumstance attending the view of the spots, or the walls within which great, daring, or important actions have been performed, is the impression they make on the mind, or rather on the heart of the spectator, for it is an emotion of feeling, rather than an effort of reflection. The murders, or political executions perpetrated in this castle, though not uninteresting, were inflicted on, and caused by men who command neither our love, nor our veneration. The character of the period, and of the men that figured in it, were alike disgusting. Bigotry and ambition, equally dark, insidious, and bloody, allow no feelings of regret. Quit the Loire, and pass to Chambord. The quantity of vines is great; they have them very flourishing on a flat poor blowing sand. How well satisfied would my friend Le Blanc be if his poorest sands at Cavenham gave him 100 dozen of good wine per acre per annum! See at one *coup d'œil* 2000 acres of them. View the royal chateau of Chambord, built by that magnificent prince Francis I. and inhabited by the late Marechal de Saxe. I had heard much of this castle, and it more than answered my expectation. It gives a great idea of the splendour of that prince. Comparing the centuries, and the revenues of Louis XIV. and Francis I. I prefer Chambord infinitely to Versailles. The apartments are large, numerous, and well contrived. I admired the stone stair-case in the centre of the house, which, being in a double spiral line, contains two distinct stair-cases, one above another, by which means people are going up and down at the same time, without seeing each other. The four apartments in the attic, with arched stone roofs, were in no mean taste. One of

these Count Saxe turned into a neat well contrived theatre. We were shewn the apartment which that great foldier occupied, and the room in which he died. Whether in his bed or not is yet a problem for anecdote hunters to solve. A report not uncommon in France was, that he was run through the heart in a duel with the Prince of Conti, who came to Chambord for that purpose; and great care was taken to conceal it from the king (Louis XV.), who had such a friendship for the marechal, that he would certainly have driven the prince out of the kingdom. There are several apartments modernized, either for the marechal or for the governors that have resided here since. In one there is a fine picture of Louis XIV. on horseback. Near the castle are the barracks for the regiment of 1500 horse, formed by Marechal de Saxe, and which Louis XV. gave him, by appointing them to garrison Chambord while their colonel made it his residence. He lived here in great splendour, and highly respected by his sovereign, and the whole kingdom.—The situation of the castle is bad; it is low, and without the least prospect that is interesting; indeed the whole country is so flat that a high ground is hardly to be found in it. From the battlements we saw the environs, of which the park or forest forms three-fourths; it contains within a wall about 20,000 arpents, and abounds with all sorts of game to a degree of profusion. Great tracks of this park are waste or under heath, &c. or at least a very imperfect cultivation: I could not help thinking, that if the King of France ever formed the idea of establishing one compleat and perfect farm under the turnip culture of England, here is the place for it. Let him assign the chateau for the residence of the director and all his attendants; and the barracks, which are now applied to no use whatever, for stalls for cattle, and the profits of the wood would be sufficient to stock and support the whole undertaking. What comparison between the utility of such an establishment, and that of a much greater expence applied here at present for supporting a wretched haras (stud), which has not a tendency but to mischief! I may recommend such agricultural establishments, but they never were made in any country, and never will be, till mankind are governed on principles absolutely contrary to those which prevail at present—until something more be thought requisite for a national husbandry than academies and memoirs.—35 miles.

The 12th. In two miles from the park wall regain the high road on the Loire. In discourse with a vigneron, we were informed that it froze this morning hard enough to damage the vines; and I may observe, that for four or five days past the weather has been constantly clear, with a bright sun, and so cold a north-east wind as to resemble much our cold clear weather in England in April; we have all our great coats on the whole day. Dine at Clarey, and view the monument of that able but bloody tyrant Louis XI. in white marble; he is represented in a kneeling posture, praying forgiveness, I suppose, which doubtless

doubtless was promised him by his priests for his basenesses and his murders. Reach Orleans.—30 miles.

The 13th. Here my companions, wanting to return as soon as possible to Paris, took the direct road thither; but, having travelled it before, I preferred that by Petivier in the way to Fontainebleau. One motive for my taking this road was its passing by Denainvilliers, the seat of the late celebrated Mons. du Hamel, where he made those experiments in agriculture which he has recited in many of his works. At Petivier I was just by it and walked thither for the pleasure of viewing grounds I had read of so often, considering them with a sort of classic reverence. His *homme d'affaire*, who conducted the farm, being dead, I could not get many particulars to be depended upon. Mons. Fougereux, the present possessor, was not at home, or I should doubtless have had all the information I wished. I examined the soil, a principal point in all experiments, when conclusions are to be drawn from them; and I took also notes of the common husbandry. Learning from the labourer who attended me that the drill-ploughs, &c. were yet in being, on a loft in one of the offices, I viewed them with pleasure, and found them, as well as I can remember, very accurately represented in the plates which their ingenious author has given. I was glad to find them laid up in a place out of common traffic, where they may remain safe till some other farming traveller, as enthusiastic as myself, may view the venerable remains of a useful genius. Here is a stove and bath for drying wheat, which he has described also. In an inclosure behind the house is a plantation of various curious exotic trees, finely grown, also several rows of ash, elm, and poplar along the roads, near the chateau, all planted by Mons. du Hamel. It gave me still greater pleasure to find that Denainvilliers is not an inconsiderable estate. The lands extensive; the chateau respectable; with offices, gardens, &c. that prove it the residence of a man of fortune; from which it appears, that this indefatigable author, however he might have failed in some of his pursuits, met with that reward from his court which did it credit to bestow; and that he was not, like others, left in obscurity to the simple rewards which ingenuity can confer on itself. Four miles before Malherbs a fine plantation of a row of trees on each side the road begins, formed by Mons. de Malherbs, and is a striking instance of attention to the decorating of an open country. More than two miles of them are mulberries. They join his other noble plantations at Malherbs, which contain a great variety of the most curious trees that have been introduced in France.—36 miles.

The 14th. After passing three miles through the forest of Fontainebleau, arrive at that town, and view the royal palace, which has been so repeatedly added to by several kings, that the share of Francis I. its original founder, is not easily

easily ascertained. He does not appear to such advantage as at Chambord. This has been a favourite with the Bourbons, from there having been so many Nimrods of that family. Of the apartments which are shewn here, the king's, the queen's, monsieur's, and madame's, are the chief. Gilding seems the prevalent decoration: but in the queen's cabinet it is well and elegantly employed. The painting of that delicious little room is exquisite; and nothing can exceed the extremity of ornament that is here with taste bestowed. The tapestries of Beauvais and the Gobelins are seen in this palace to great advantage. I liked to see the gallery of Francis I. preserved in its ancient state, even to the andirons in the chimney, which are those that served that monarch. The gardens are nothing; and the grand canal, as it is called, not to be compared with that at Chantilly. In the pond that joins the palace are carp as large and as tame as the Prince of Condé's. The landlord of the inn at Fontainebleau thinks that royal palaces should not be seen for nothing; he made me pay 10 liv. for a dinner, which would have cost me not more than half the money at the star and garter at Richmond. Reach Meulan.—34 miles.

The 15th. Cross, for a considerable distance, the royal oak forest of Senár.—About Montgeron, all open fields, which produce corn and partridges to eat it, for the number is enormous. There is on an average a covey of birds on every two acres, besides favourite spots, where they abound much more. At St. George the Seine is a much more beautiful river than the Loire. Enter Paris once more, with the same observation I made before, that there is not one-tenth of the motion on the roads around it that there is around London. To the hotel de la Rochefoucauld.—20 miles.

The 16th. Accompanied the Count de la Rochefoucauld to Liancourt.—38 miles.

I went thither on a visit for three or four days; but the whole family contributed so generally to render the place in every respect agreeable, that I staid more than three weeks. At about half a mile from the chateau is a range of hill that was chiefly a neglected waste: the Duke of Liancourt has lately converted this into a plantation, with winding walks, benches, and covered seats, in the English style of gardening. The situation is very fortunate. These ornamented paths follow the edge of the declivity to the extent of three or four miles. The views they command are every where pleasing, and in some places great. Nearer to the chateau the Duchess of Liancourt has built a menagerie and dairy in a pleasing taste. The cabinet and ante-room are very pretty; the saloon elegant, and the dairy entirely constructed of marble. At a village near Liancourt, the duke has established a manufacture of linen and stuffs mixed with thread and cotton, which promises to be of considerable utility; there are 25 looms employed, and preparations making for more.

more. As the spinning for these looms is also established, it gives employment to great numbers of hands who were idle, for they have no sort of manufacture in the country though it is populous. Such efforts merit great praise. Connected with this is the execution of an excellent plan of the duke's for establishing habits of industry in the rising generation. The daughters of the poor people are received into an institution to be educated to useful industry: they are instructed in their religion, taught to write and read, and to spin cotton: are kept till marriageable, and then a regulated proportion of their earnings given them as a marriage portion. There is another establishment of which I am not so good a judge; it is for training the orphans of soldiers to be soldiers themselves. The Duke of Liancourt has raised some considerable buildings for their accommodation well adapted to the purpose. The whole is under the superintendence of a worthy and intelligent officer, *Monf. le Roux*, captain of dragoons, and *Croix de St. Louis*, who examines every thing himself. There are at present 120 boys, all dressed in uniform.—My ideas have all taken a turn which I am too old to change: I should have been better pleased to see 120 lads educated to the plough, in habits of culture superior to the present; but certainly the establishment is humane, and the conduct of it excellent.

The ideas I had formed, before I came to France, of a country residence in that kingdom, I found at Liancourt to be far from correct. I expected to find it a mere transfer of Paris to the country, and that all the burthened forms of a city were preserved, without its pleasures; but I was deceived: the mode of living, and the pursuits, approach much nearer to the habits of a great nobleman's house in England, than would commonly be conceived. A breakfast of tea for those who chose to repair to it; riding, sporting, planting, gardening, till dinner, and that not till half after two o'clock, instead of their old fashioned hour of twelve; music, chess, and the other common amusements of a rendezvous-room, with an excellent library of seven or eight thousand volumes, were well calculated to make the time pass agreeably; and to prove that there is a great approximation in the modes of living at present in the different countries of Europe. Amusements, in truth, ought to be numerous within doors; for, in such a climate, none are to be depended on without: the rain that has fallen here is hardly credible. I have, for five-and-twenty years past, remarked in England, that I never was prevented by rain from taking a walk every day without going out while it actually rains; it may fall heavily for many hours; but a person who watches an opportunity gets a walk or a ride. Since I have been at Liancourt, we have had three days in succession of such incessantly heavy rain, that I could not go an hundred yards from the house to the duke's pavilion, without danger of being quite wet. For ten days more rain fell here, I am confident, had there been a gauge to measure it, than

than ever fell in England in thirty. The present fashion in France, of passing some time in the country, is new; at this time of the year, and for many weeks past, Paris is, comparatively speaking, empty. Every body who has a country-seat is at it; and such as have none visit others who have. This remarkable revolution in the French manners is certainly one of the best customs they have taken from England; and its introduction was effected the easier, being assisted by the magic of Rousseau's writings. Mankind are much indebted to that splendid genius, who, when living, was hunted from country to country, to seek an asylum, with as much venom as if he had been a mad dog; thanks to the vile spirit of bigotry, which has not yet received its death's wound. Women of the first fashion in France are now ashamed of not nursing their own children; and stays are universally proscribed from the bodies of the poor infants, which were for so many ages tortured in them, as they are still in Spain. The country residence may not have effects equally obvious; but they will be no less sure in the end, and in all respects beneficial to every class in the state.

The Duke of Liancourt being president of the provincial assembly of the election of Clermont, and passing several days there in business, asked me to dine with the assembly, as he said there were to be some considerable farmers present. These assemblies were to me interesting to see. I accepted the invitation with pleasure. Three considerable farmers, renters, not proprietors of land, were members, and present. I watched their carriage narrowly, to see their behaviour in the presence of a great lord of the first rank, considerable property, and high in royal favour; and it was with pleasure that I found them behaving with becoming ease and freedom, and though modest, and without any thing like flippancy, yet without any obsequiousness offensive to English ideas. They started their opinions freely, and adhered to them with becoming confidence. A more singular spectacle, was to see two ladies present at a dinner of this sort, with five or six and twenty gentlemen; such a thing could not happen in England. To say that the French manners, in this respect, are better than our own, is the assertion of an obvious truth. If the ladies be not present at meetings where the conversation has the greatest probability of turning on subjects of more importance than the frivolous topics of common discourse, the sex must either remain on the one hand in ignorance, or, on the other, be filled with the foppery of education, learned, affected, and forbidding. The conversation of men, not engaged in trifling pursuits, is the best school for the education of a woman.

The political conversation of every company I have seen has turned much more on the affairs of Holland than on those of France. The preparations going on for a war with England are in the mouths of all the world; but the finances of France are in such a state of derangement, that the people best informed assert a war to be impossible; the Marquis of Verac, the late French ambassador at the

a war to be impossible; the Marquis of Verac, the late French ambassador at the Hague, who was sent thither, as the English politicians assert, expressly to bring about a revolution in the government, has been at Liancourt three days. It may easily be supposed, that he is cautious in what he says in such a mixed company; but it is plain enough, that he is well persuaded that that revolution, change, or lessening the Stadtholder's power; that plan, in a word, whatever it was, for which he negotiated in Holland, had for some time been matured and ready for execution, almost without a possibility of failure, had the Count de Vergennes consented, and not spun out the business by refinement on refinement, to make himself the more necessary to the French cabinet; and it unites with the idea of some sensible Dutchmen, with whom I have conversed on the subject.

During my stay at Liancourt, my friend Lazowski accompanied me on a little excursion of two days to Ermenonville, the celebrated seat of the Marquis de Girardon. We passed by Chantilly to Morefontain, the country-seat of Mons. de Morefontain, *prevost des merchants* of Paris; the place has been mentioned as decorated in the English style. It consists of two scenes; one a garden of winding walks, and ornamented with a profusion of temples, benches, grottos, columns, ruins, and I know not what: I hope the French who have not been in England do not consider this as the English taste. It is in fact as remote from it as the most regular style of the last age. The water view is fine. There is a gaiety and cheerfulness in it that contrast well with the brown and unpleasant hills that surround it, and which partake of the waste character of the worst part of the surrounding country. Much has been done here; and it wants but few additions to be as perfect as the ground admits.

Reach Ermenonville, through another part of the Prince of Condé's forest, which joins the ornamented grounds of the Marquis Girardon. This place, after the residence and death of the persecuted but immortal Rousseau, whose tomb every one knows is here, became so famous as to be resorted to very generally. It has been described, and plates published of the chief views; to enter into a particular description would therefore be tiresome; I shall only make one or two observations, which I do not recollect have been touched on by others. It consists of three distinct water scenes; or of two lakes and a river. We were first shewn that which is so famous for the small isle of poplars, in which reposes all that was mortal of that extraordinary and inimitable writer. This scene is as well imagined, and as well executed as could be wished. The water is between forty and fifty acres; hills rise from it on both sides, and it is sufficiently closed in by tall wood at both ends, to render it sequestered. The remains of departed genius stamp a melancholy idea, from which decoration would depart too much, and accordingly there is little. We viewed the scene in a still evening. The declining sun threw a lengthened shade on the lake, and silence

seemed to repose on its unruffled bosom; as some poet says, I forget who. The worthies to whom the temple of philosophers is dedicated, and whose names are marked on the columns, are NEWTON, *Lucem*.—DESCARTES, *Nil in rebus inane*.—VOLTAIRE, *Ridiculum*.—ROUSSEAU, *Naturam*.—And on another unfinished column, *Quis hoc perficiet?* The other lake is larger; it nearly fills the bottom of the vale, around which are some rough, rocky, wild, and barren sand hills; either broken or spread with heath; in some places wooded, and in others scattered thinly with junipers. The character of the scene is that of wild and undecorated nature, in which the hand of art was meant to be concealed as much as was consistent with ease of access. The last scene is that of a river, which is made to wind through a lawn, receding from the house, and broken by wood: the ground is not fortunate; it is too dead a flat, and no where viewed to much advantage.

From Ermenonville we went, the morning after, to Brasseuse, the seat of Madame du Pont, sister of the Dukes of Liancourt. What was my surprise at finding this Viscountess a great farmer! A French lady, young enough to enjoy all the pleasures of Paris, living in the country, and minding her farm, was an unlooked for spectacle. She has probably more lucerne than any other person in Europe—250 arpents. She gave me, in a most unaffected and agreeable manner, intelligence about her lucerne and dairy; but of that more elsewhere. Returned to Liancourt by Pont, where there is a handsome bridge, of three arches, the construction uncommon, each pier consisting of four pillars, with a towing-path under one of the arches for the barge-horses, the river being navigable.

Amongst the morning amusements I partook at Liancourt was *la chassè*. In deer shooting, the sportsmen place themselves at distances around a wood, then beat it, and seldom more than one in a company gets a shot; it is more tedious than is easily conceived: like angling, incessant expectation, and perpetual disappointment. Partridge and hare shooting are almost as different from that of England. We took this diversion in the fine vale of Catnoir, five or six miles from Liancourt; arranging ourselves in a file at about thirty yards from person to person, and each with a servant and a loaded gun, ready to present when his master fires: thus we marched across and across the vale, treading up the game. Four or five brace of hares, and twenty brace of partridges were the spoils of the day. I like this mode of shooting but little better than waiting for deer. The best circumstance to me of exercise in company (it was not so once) is the festivity of the dinner at the close of the day. To enjoy this, it must not be pushed to great fatigue. Good spirits, after violent exercise, are always the affectation of silly young folks (I remember being that sort of fool myself when I was young), but with something more than moderate, the exhilaration of body is in unison with the flow of temper, and agreeable company is then delicious. On such days as these

these we were too late for the regular dinner, and had one by ourselves, with no other dressing than the refreshment of clean linen; and these were not the repasts when the duchess's champagne had the worst flavour. A man is a poor creature who does not drink a little too much on such occasions: *mais prenez-y-garde*: repeat it often; and you may make it a mere drinking party, the lustre of the pleasure fades, and you become what *was* an English fox-hunter. One day while we were thus dining à l'Anglois, and drinking the plough, the chace, and I know not what, the Duchess of Liancourt and some of her ladies came in sport to see us. It was a moment for them to have betrayed ill-nature in the contempt of manners not French, which they might have endeavoured to conceal under a laugh:—but nothing of this; it was a good humoured curiosity; a natural inclination to see others pleased and in spirits. *Ils ont été de grands chasseurs aujourd' hui*, said one. *Oh! ils s'applaudissent de leurs exploits*. Do they drink the gun? said another. *Leurs maitresses certainement*, added a third. *J'aime à les voir en gaiété; il y a quelque chose d' aimable dans tout ceci*. To note such trifles may seem superfluous to many: but what is life when trifles are withdrawn? They mark the temper of a nation better than objects of importance. In the moments of council, victory, flight, or death, mankind, I suppose, are nearly the same. Trifles discriminate better, and the number is infinite that gives me an opinion of the good temper of the French. I am fond neither of a man nor a recital that can appear only on stilts, and dressed in holiday geers. It is every-day feelings that decide the colour of our lives; and he who values them the most plays the best for the stake of happiness. But it is time to quit Liancourt, which I do with regret. Take leave of the good old Duchesses d'Estillac, whose hospitality and kindness ought ever to be remembered.

—51 miles.

The 9th, 10th, and 11th. Return by Beauvais and Pontoise, and enter Paris for the fourth time, confirmed in the idea that the roads immediately leading to that capital are deserts, comparatively speaking, with those of London. By what means can the connection be carried on with the country? The French must be the most stationary people upon earth, when in a place they must rest without a thought of going to another; or the English must be the most restless; and find more pleasure in moving from one place to another, than in resting to enjoy life in either. If the French nobility went only to their country seats when exiled thither by the court, the roads could not be more solitary. —

25 miles.

The 12th. My intention was to take lodgings; but on arriving at the hotel de la Rochefoucauld, I found that my hospitable duchess was the same person at the capital as in the country; she had ordered an apartment to be ready for me. It grows so late in the season, that I shall make no other stay here than what will be necessary for viewing public buildings. This will unite well

enough with delivering some letters I brought to a few men of science; and it will leave me the evenings for the theatres, of which there are many in Paris. In throwing on paper a rapid *coup d'œil*, of what I see of a city, so well known in England, I shall be apt to delineate my own ideas and feelings, perhaps more than the objects themselves; and be it remembered, that I profess to dedicate this careless itinerary to trifles, much more than to objects that are of real consequence. From the tower of the cathedral, the view of Paris is complete. It is a vast city, even to the eye that has seen London from St. Paul's; a circular form gives an advantage to Paris; but a much greater is the atmosphere. It is now so clear, that one would suppose it the height of summer: the clouds of coal-smoke, that envelope London, always prevent a distinct view of that capital, but I take it to be one-third at least larger than Paris. The buildings of the parliament-house are disfigured by a gilt and taudry gate, and a French roof. The hotel des Monnoies is a fine building; and the façade of the Louvre one of the most elegant in the world, because they have (to the eye) no roofs; in proportion as a roof is seen, a building suffers. I do not recollect one edifice of distinguished beauty (unless with domes) in which the roof is not so flat as to be hidden, or nearly so. What eyes then must the French architects have had, to have loaded so many buildings with coverings of a height destructive of all beauty? Put such a roof as we see on the parliament-house or on the Thuilleries, upon the façade of the Louvre, and where would its beauty be?—At night to the opera, which I thought a good theatre, till they told me it was built in six weeks; and then it became good for nothing in my eyes, for I suppose it will be tumbling down in six years. Durability is one of the essentials of building: what pleasure would a beautiful front of painted pasteboard give? The *Alceste* of Gluck was performed; that part by Mademoiselle St. Huberti, their first singer, an excellent actress. As to scenes, dresses, decorations, dancing, &c. this theatre is much superior to that in the Haymarket.

The 13th. Across Paris to the rue des blancs Manteaux, to Mons. Broussonet, secretary of the Society of Agriculture; he is in Burgundy. Called on Mr. Cook from London, who is at Paris with his drill-plough, waiting for weather to shew its performance to the Duke of Orleans: this is a French idea, improving France by drilling. A man should learn to walk before he learns to dance. There is agility in cutting capers, and it may be done with grace; but where is the necessity to cut them at all? There has been much rain to-day; and it is almost incredible to a person used to London, how dirty the streets of Paris are, and how horribly inconvenient and dangerous walking is without a foot-pavement. We had a large party at dinner, with politicians among them, and some interesting conversation on the present state of France. The feeling of every body seems to be that the archbishop will not be able to do any thing

thing towards exonerating the state from the burthen of its present situation; some think that he has not the inclination; others that he has not the courage; others that he has not the ability. By some he is thought to be attentive only to his own interest; and by others, that the finances are too much deranged to be within the power of any system to recover, short of the states-general of the kingdom; and that it is impossible for such an assembly to meet without a revolution in the government ensuing. All seem to think that something extraordinary will happen; and a bankruptcy is an idea not at all uncommon. But who is there that will have the courage to make it?

The 14th. To the benedictine abbey of St. Germain, to see pillars of African marble, &c. It is the richest abbey in France: the abbot has 300,000 liv. a year (13,125l.) I lose my patience at seeing such revenues thus bestowed; consistent with the spirit of the tenth century, but not with that of the eighteenth. What a noble farm would a fourth of this income establish! what turnips, what cabbages, what potatoes, what clover, what sheep, what wool!—Are not these things better than a fat ecclesiastic? If an active English farmer were mounted behind this abbot, I think he would do more good to France with half the income than half the abbots of the kingdom with the whole of theirs. Pass the Bastille; another pleasant object to make agreeable emotions vibrate in a man's bosom. I search for good farmers, and run my head at every turn against monks and state prisons.—To the arsenal, to wait on Mons. Lavoisier, the celebrated chemist, whose theory of the non-existence of phlogiston has made as much noise in the chemical world as that of Stahl, which established its existence. Dr. Priestley had given me a letter of introduction. I mentioned in the course of conversation his laboratory, and he appointed Tuesday. By the Boulevards, to the *Place Louis XV.* which is not properly a square, but a very noble entrance to a great city. The façades of the two buildings erected are highly finished. The union of the *Place Louis XV.* with the *champs Elisées*, the gardens of the *Thuilleries* and the *Seine* is open, airy, elegant, and superb; and is the most agreeable and best built part of Paris; here one can be clean and breathe freely. But by far the finest thing I have yet seen at Paris is the *Halle aux bleds*, or corn market: it is a vast rotunda; the roof entirely of wood, upon a new principle of carpentry, to describe which would demand plates and long explanations; the gallery is 150 yards round, consequently the diameter is as many feet: it is as light as if suspended by the fairies. In the grand area, wheat, pease, beans, lentils, are stored and sold. In the surrounding divisions, flour on wooden stands. You pass by stair-cases doubly winding within each other to spacious apartments for rye, barley, oats, &c. The whole is so well planned, and so admirably executed, that I know of no public building that exceeds it either in France or England. And if an appropriation

priation of the parts to the conveniencies wanted, and an adaptation of every circumstance to the end required, in union with that elegance which is consistent with use, and that magnificence which results from stability and duration, be the criteria of public edifices, I know nothing that equals it:—it has but one fault, and that is situation; it should have been upon the banks of the river, for the convenience of unloading barges without land carriage. In the evening, to the *Comedie Italienne*; the edifice fine; and the whole quarter regular and new built, a private speculation of the duke de Choiseul, whose family has a box entailed for ever.—L'Aimant jaloux. Here is a young singer, Mademoiselle Rénard, with so sweet a voice, that if she sung Italian, and had been taught in Italy, would have made a delicious performer.

To the tomb of Cardinal de Richlieu, which is a noble production of genius: by far the finest statue I have seen. Nothing can be imagined more easy and graceful than the attitude of the cardinal, nor can nature be more expressive than the figure of weeping science. Dine with my friend at the Palais Royal at a coffee-house; well dressed people; every thing clean, good, and well served: but here, as every where else, you pay a good price for good things; we ought never to forget that a low price for bad things is not cheapness. In the evening to *l'Ecole des Peres*, at the *Comedie Française*, a crying *larmoyant* thing. This theatre, the principal one at Paris, is a fine building, with a magnificent portico. After the circular theatres of France, how can any one relish our ill-contrived oblong holes of London?

The 16th. To Mons. Lavoisier, by appointment. Madame Lavoisier, a lively, sensible, scientific lady, had prepared a *dejeuné Anglois* of tea and coffee; but her conversation on Mr. Kirwan's Essay on Phlogiston, which she is translating from the English, and on other subjects, which a woman of understanding, who works with her husband in his laboratory, knows how to adorn, was the best repast. That apartment, the operations of which have been rendered so interesting to the philosophical world, I had pleasure in viewing. In the apparatus for aerial experiments, nothing makes so great a figure as the machine for burning inflammable and vital air, to make, or deposit water; it is a splendid machine. Three vessels are held in suspension with indexes for marking the immediate variations of their weights; two, that are as large as half hogsheds, contain the one inflammable, the other the vital air, and a tube of communication passes to the third, where the two airs unite and burn; by contrivances, too complex to describe without plates, the loss of weight of the two airs, as indicated by their respective balances, equal at every moment to the gain in the third vessel from the formation or deposition of the water, it not being yet ascertained whether the water be actually made or deposited. If accurate (of which I must confess I have little conception), it is a noble machine. Mons. Lavoisier, when the structure
of

of it was commended, said, *Mais oùi monsieur, & même par un artiste François !* with an accent of voice that admitted their general inferiority to ours. It is well known that we have a considerable exportation of mathematical and other curious instruments to every part of Europe, and to France amongst the rest. Nor is this new, for the apparatus with which the French academicians measured a degree in the polar circle was made by Mr. George Graham *. Another engine Mons. Lavoisier shewed us was an electrical apparatus inclosed in a balloon, for trying electrical experiments in any sort of air. His pond of quicksilver is considerable, containing 250lb. and his water apparatus very great, but his furnaces did not seem so well calculated for the higher degrees of heat as some others I have seen. I was glad to find this gentleman splendidly lodged, and with every appearance of a man of considerable fortune. This ever gives one pleasure: the employments of a State can never be in better hands than of men who thus apply the superfluity of their wealth. From the use that is generally made of money, one would think it the assistance of all others of the least consequence in effecting any business truly useful to mankind, many of the great discoveries that have enlarged the horizon of science having been in this respect the result of means seemingly inadequate to the end: the energetic exertions of ardent minds, bursting from obscurity, and breaking the bands inflicted by poverty, perhaps by distress. To the *hotel des invalids*, the major of which establishment had the goodness to shew the whole of it. In the evening to Mons. Lomond, a very ingenious and inventive mechanic, who has made an improvement of the jenny for spinning cotton. Common machines are said to make too hard a thread for certain fabrics, but this forms it loose and spongy. In electricity he has made a remarkable discovery: you write two or three words on a paper; he takes it with him into a room, and turns a machine inclosed in a cylindrical case, at the top of which is an electrometer, a small fine pith ball; a wire connects with a similar cylinder and electrometer in a distant apartment; and his wife, by remarking the corresponding motions of the ball, writes down the words they indicate: from which it appears that he has formed an alphabet of motions. As the length of the wire makes no difference in the effect, a correspondence might be carried on at any distance: within and without a besieged town, for instance; or for a purpose much more worthy, and a thousand times more harmless, between two lovers prohibited or prevented from any better connection. Whatever the use may be, the invention is beautiful. Mons. Lomond has many other curious machines, all the entire work of his own hands: mechanical invention seems to be in him a natural propensity. In the evening to the *Comédie Française*. Mola did the *Bourru Bienfaisant*, and it is not easy for acting to be carried to greater perfection.

The 17th. To Mons. l'Abbé Meffier, astronomer royal, and of the Academy.

* Whitehurst's Formation of the Earth, 2d edit. p. 6.

of Sciences. View the exhibition, at the Louvre, of the Academy's paintings. For one history piece in our exhibitions at London here are ten; abundantly more than to balance the difference between an annual and biennial exhibition. Dined to-day with a party, whose conversation was entirely political. Monf. de Calonne's *Requête au Roi* is come over, and all the world are reading and disputing on it. It seems, however, generally agreed that, without exonerating himself from the charge of the agiotage, he has thrown no inconsiderable load on the shoulders of the archbishop of Toulouze, the present premier, who will be puzzled to get rid of the attack. But both these ministers were condemned on all hands in the lump; as being absolutely unequal to the difficulties of so arduous a period. One opinion pervaded the whole company, that they are on the eve of some great revolution in the government: that every thing points to it: the confusion in the finances great; with a *deficit* impossible to provide for without the states-general of the kingdom, yet no ideas formed of what would be the consequence of their meeting: no minister existing, or to be looked to in or out of power, with such decisive talents as to promise any other remedy than palliative ones: a prince on the throne, with excellent dispositions, but without the resources of a mind that could govern in such a moment without ministers: a court buried in pleasure and dissipation; and adding to the distress, instead of endeavouring to be placed in a more independent situation: a great ferment amongst all ranks of men, who are eager for some change, without knowing what to look to, or to hope for: and a strong leaven of liberty, increasing every hour since the American revolution; altogether form a combination of circumstances that promise ere long to ferment into motion, if some master hand, of very superior talents, and inflexible courage, be not found at the helm to guide events, instead of being driven by them. It is very remarkable, that such conversation never occurs, but a bankruptcy is a topic: the curious question on which is, *would a bankruptcy occasion a civil war, and a total overthrow of the government?* The answers that I have received to this question appear to be just: such a measure, conducted by a man of abilities, vigour, and firmness, would certainly not occasion either one or the other. But the same measure, attempted by a man of a different character, might possibly do both. All agree, that the states of the kingdom cannot assemble without more liberty being the consequence; but I meet with so few men who have any just ideas of freedom, that I question much the species of this new liberty that is to arise. They know not how to value the privileges of THE PEOPLE: as to the nobility and the clergy, if a revolution added any thing to their scale, I think it would do more mischief than good*.

* In transcribing these papers for the press, I smile at some remarks and circumstances which events have since placed in a singular position; but I alter none of these passages; they explain what were the opinions in France, before the revolution, on topics of importance; and the events which have since taken place render them the more interesting. June, 1790.

The 18th. To the Gobelins, which is undoubtedly the first manufacture of tapestry in the world, and such an one as could be supported by a crowned head only. In the evening to that incomparable comedy *La Metromanie*, of Pyron, and well acted. The more I see of it, the more I like the French theatre; and have no doubt in preferring it far to our own. Writers, actors, buildings, scenes, decorations, music, dancing, take the whole in a mass, and it is unrivalled by London. We have certainly a few brilliants of the first water; but throw all in the scales, and that of England kicks the beam. I write this passage with a lighter heart than I should do were it giving the palm to the French plough.

The 19th. To Charenton, near Paris, to see *l'Ecole Veterinaire*, and the farm of the Royal Society of Agriculture. Monf. Chabert, the directeur-general, received us with the most attentive politeness. Monf. Flandrein, his assistant, and son-in-law, I had had the pleasure of knowing in Suffolk. They shewed the whole veterinary establishment, and it does honour to the government of France. It was formed in 1766: in 1783 a farm was annexed to it, and four other professorships established; two for rural œconomy, one for anatomy, and another for chemistry.—I was informed that Monf. d'Aubenton, who is at the head of this farm with a salary of 6000 liv. a year, reads lectures of rural œconomy, particularly on sheep, and that a flock was for that purpose kept in exhibition. There is a spacious and convenient apartment for dissecting horses and other animals; a large cabinet, where the most interesting parts of all domestic animals are preserved in spirits: and also of such parts of the bodies that mark the visible effect of distempers. This is very rich. This, with a similar one near Lyons, is kept up (exclusive of the addition of 1783), at the moderate expence, as appears by the writings of M. Necker, of about 60,000 liv. (2600l.) Whence, as in many other instances, it appears that the most useful things cost the least. There are at present about one hundred élèves from different parts of the kingdom, as well as from every country in Europe, *except England*; a strange exception, considering how grossly ignorant our farriers are; and that the whole expence of supporting a young man here does not exceed forty louis a year; nor more than four years necessary for his complete instruction. As to the farm, it is under the conduct of a great naturalist, high in royal academies of science, and whose name is celebrated through Europe for merit in superior branches of knowledge. It would argue in me a want of judgment in human nature, to expect good practice from such men. They would probably think it beneath their pursuits and situation in life to be good ploughmen, turnip-hoers, and shepherds; I should therefore betray my own ignorance of life, if I were to express any surprize at finding this farm in a situation that—I had rather forget than describe. In the evening, to a field much
M. more

more successfully cultivated, Mademoiselle St. Huberti, in the Penelope of Picini.

The 20th. To the *Ecole Militaire*, established by Louis XV. for the education of 140 youths, the sons of the nobility; such establishments are equally ridiculous and unjust. To educate the son of a man who cannot afford the education himself, is a gross injustice, if you do not secure a situation in life answerable to that education. If you do secure such a situation, you destroy the result of the education, because nothing but merit ought to give that security. If you educate the children of men, who are well able to give the education themselves, you tax the people who cannot afford to educate their children, in order to ease those who can well afford the burthen; and, in such institutions, this is sure to be the case. At night to *l'Ambigu Comique*, a pretty little theatre, with plenty of rubbish on it. Coffee-houses on the boulevards, music, noise, and *filles* without end; every thing but scavengers and lamps. The mud is a foot deep; and there are parts of the boulevards without a single light.

The 21st. Mons. de Brouffonet being returned from Burgundy, I had the pleasure of passing a couple of hours at his lodgings very agreeably. He is a man of uncommon activity, and possessed of a great variety of useful knowledge in every branch of natural history; and he speaks English perfectly well. It is very rare that a gentleman is seen better qualified for a post than Mons. de Brouffonet for that which he occupies, of secretary to a Royal Society.

The 22d. To the bridge of Neuil , said to be the finest in France. It is by far the most beautiful one I have any where seen. It consists of five vast arches; flat, from the Florentine model; and all of equal span; a mode of building incomparably more elegant, and more striking than our system of different sized arches. To the machine at Marly; which ceases to make the least impression. Madame du Barr 's residence, Lusienne, is on the hill just above this machine; she has built a pavilion on the brow of the declivity, for commanding the prospect, fitted up and decorated with much elegance. There is a table formed of Seve porcelain, exquisitely done. I forget how many thousand louis d'ors it cost. The French, to whom I spoke of Lusienne, exclaimed against mistresses and extravagance, with more violence than reason in my opinion. Who, in common sense, would deny a king the amusement of a mistress, provided he did not make a business of his play-thing? *Mais Frederic le Grand avoit-il une maitresse, lui faisoit-il batir des pavillons, et les meubloit-il de tables de porcelaine?* No: but he had that which was fifty times worse: a king had better make love to a handsome woman than to one of his neighbour's provinces. The king of Prussia's mistress cost an hundred millions sterling, and the lives of 500,000 men; and before the reign of that mistress is over, may yet cost as much more. The greatest genius and talents are lighter than a feather, weighed philosophically, if rapine, war, and conquest be the effects of them.

To

To St. Germain's, the terrace of which is very fine. Monf. de Brouffonet met me here, and we dined with Monf. Breton, at the Maréchal duc de Noailles, who has a good collection of curious plants. Here is the finest *sophora japonica* I have seen.—10 miles.

The 23d. To Trianon, to view the Queen's *Jardin Anglois*. I had a letter to Monf. Richard, which procured admittance. It contains about 100 acres, disposed in the taste of what we read of in books of Chinese gardening, whence it is supposed the English style was taken. There is more of Sir William Chambers here than of Mr. Brown—more effort than nature—and more expence than taste. It is not easy to conceive any thing that art can introduce in a garden that is not here; woods, rocks, lawns, lakes, rivers, islands, cascades, grottos, walks, temples, and even villages. There are parts of the design very pretty, and well executed. The only fault is too much crouding; which has led to another, that of cutting the lawn by too many gravel walks, an error to be seen in almost every garden I have met with in France. But the glory of *La Petite Trianon* is the exotic trees and shrubs. The world has been successfully rified to decorate it. Here are curious and beautiful ones to please the eye of ignorance; and to exercise the memory of science. Of the buildings, the temple of love is truly elegant.

Again to Versailles. In viewing the King's apartment, which he had not left a quarter of an hour, with those slight traits of disorder that shewed he *lived* in it, it was amusing to see the blackguard figures that were walking uncontrouled about the palace, and even in his bed-chamber; men whose rags betrayed them to be in the last stage of poverty, and I was the only person that stared and wondered how they got thither. It is impossible not to like this careless indifference and freedom from suspicion. One loves the master of the house, who would not be hurt or offended at seeing his apartment thus occupied, if he returned suddenly; for if there were danger of this, the intrusion would be prevented. This is certainly a feature of that *good temper* which appears to me so visible every where in France. I desired to see the Queen's apartments, but I could not. Is her majesty in it? No. Why then not see it as well as the King's? *Ma foi, Monf. c'est un autre chose*. Ramble through the gardens, and by the grand canal, with absolute astonishment at the exaggerations of writers and travellers. There is magnificence in the quarter of the orangerie, but no beauty any where; there are some statues good enough to be wished under cover. The extent and breadth of the canal are nothing to the eye; and it is not in such good repair as a farmer's horse-pond. The menagerie is well enough, but nothing great. Let those who desire that the buildings and establishments of Louis XIV. should continue the impression made by

the writings of Voltaire, go to the canal of Languedoc, and by no means to Versailles. Return to Paris.—14 miles.

The 24th. With Monf. de Brouffonet to the King's cabinet of natural history and the botanical garden, which is in beautiful order. Its riches are well known, and the politeness of Monf. Thouin, which is that of a most amiable disposition, renders this garden the scene of other rational pleasures besides those of botany. Dine at the Invalides, with Monf. Parmentier, the celebrated author of many æconomical works, particularly on the *boulangerie* of France. This gentleman, to a considerable mass of useful knowledge, adds a great deal of that fire and vivacity for which his nation has been distinguished, but which I have not recognized so often as I expected.

The 25th. This great city appears to be in many respects the most ineligible and inconvenient for the residence of a person of small fortune of any that I have seen; and by far inferior to London. The streets are very narrow, and many of them crowded, nine-tenths dirty, and all without foot-pavements. Walking, which in London is so pleasant and so clean, that ladies do it every day, is here a toil and fatigue to a man, and an impossibility to a well dressed woman. The coaches are numerous, and, what is much worse, there is an infinity of one-horse cabriolets, which are driven by young men of fashion and their imitators, alike fools, with such rapidity as to be real nuisances, and render the streets exceedingly dangerous, without an incessant caution. I saw a poor child run over and probably killed, and have been myself many times blackened with the mud of the kennels. This beggarly practice, of driving a one-horse booby hutch about the streets of a great capital, flows either from poverty or a wretched and despicable æconomy; nor is it possible to speak of it with too much severity. If young noblemen at London were to drive their chaises in streets without foot-ways, as their brethren do at Paris, they would speedily and justly get very well threshed, or rolled in the kennel. This circumstance renders Paris an ineligible residence for persons, particularly families that cannot afford to keep a coach; a convenience which is as dear as at London. The *fiacres*, hackney-coaches, are much worse than at that city; and chairs there are none, for they would be driven down in the streets. To this circumstance also it must be ascribed, that all persons of small or moderate fortune are forced to dress in black, with black stockings; the dusky hue of this in company is not so disagreeable a circumstance as being too great a distinction; too clear a line drawn in company between a man that has a good fortune, and another that has not. With the pride, arrogance, and ill temper of English wealth this could not be borne; but the prevailing good humour of the French eases all such untoward circumstances. Lodgings are not half so good as at London, yet considerably dearer. If you do not hire a whole suite of rooms at

an hotel, you must probably mount three, four, or five pair of stairs, and in general have nothing but a bed-chamber. After the horrid fatigue of the streets, such an elevation is a delectable circumstance. You must search with trouble before you will be lodged in a private family, as gentlemen usually are at London, and pay a higher price. Servants wages are about the same as at that city. It is to be regretted that Paris should have these disadvantages, for in other respects I take it to be a most eligible residence for such as prefer a great city. The society for a man of letters, or who has any scientific pursuit, cannot be exceeded. The intercourse between such men and the great, which, if it be not upon an equal footing, ought never to exist at all, is respectable. Persons of the highest rank pay an attention to science and literature, and emulate the character they confer. I should pity the man who expected, without other advantages of a very different nature, to be well received in a brilliant circle at London, because he was a fellow of the Royal Society. But this would not be the case with a member of the Academy of Sciences at Paris; he is sure of a good reception every where. Perhaps this contrast depends in a great measure on the difference of the governments of the two countries. Politics are too much attended to in England to allow a due respect to be paid to any thing else; and should the French establish a freer government, academicians will not be held in such estimation, when rivalled in the public esteem by the orators who hold forth liberty and property in a free parliament.

The 28th. Quit Paris, and take the road to Flanders. *Monf. de Brouffonet* was so obliging as to accompany me to Dugny, to view the farm of *Monf. Cretté de Palluel*, a very intelligent cultivator. Take the road to Senlis: at Dammertin, I met by accident a French gentleman, a *Monf. du Pré du St. Cotin*. Hearing me conversing with a farmer on agriculture, he introduced himself as an amateur, gave me an account of several experiments he had made on his estate in Champagne, and promised a more particular detail; in which he was as good as his word.—22 miles.

The 29th. Pass Nanteul, where the Prince of Condé has a chateau, to Villes-Coterets, in the midst of immense forests belonging to the Duke of Orleans. The crop of this country, therefore, is princes of the blood; that is to say, hares, pheasants, deer, boars!—26 miles.

The 30th. Soissons seems a poor town, without manufactures, and chiefly supported by a corn-trade, which goes hence by water to Paris and Rouen.—25 miles.

The 31st. Coucy is beautifully situated on a hill, with a fine vale winding beside it. At St. Gobin, which is in the midst of great woods, I viewed the fabric of plate-glass the greatest in the world. I was in high luck, arriving about half an hour before they began to run glasses for the day. Pass La Fere.

Reach

Reach St. Quentin, where are considerable manufactures that employed me all the afternoon. From St. Gobin, are the most beautiful slate roofs I have any where seen.—30 miles.

NOVEMBER 1. Near Belle Angloise I turned aside half a league to view the canal of Picardy, of which I had heard much. In passing from St. Quentin to Cambray the country rises, so that it was necessary to carry it in a tunnel under ground for a considerable depth, even under many vales as well as hills. In one of these vallies there is an opening for visiting it by an arched stair-case, on which I descended 134 steps to the canal, and, as this valley is much below the adjacent and other hills, the great depth at which it is digged may be conceived. Over the door of the descent, is the following inscription:—*L'ann. 1781.——Mons. le Comte d'Agay étant intendant de cette province, Mons. Laurent de Lionni étant directeur de l'ancien & nouveau canal de Picardie, & Mons. de Champrose inspecteur, Joseph II. Empereur Roi des Romains, a parcouru en bateau le canal sous terrain depuis cet endroit jusques au puit, No. 20, le 28, & a temoigné sa satisfaction d'avoir vu cet ouvrage en ces termes: "Je suis fier d'être homme, quand je vois qu'un de mes semblables a osé imaginer & executer un ouvrage aussi vaste et aussi hardie. Cette idea me leve l'ame."*—These three Messieurs lead the dance here in a very French style. The great Joseph follows humbly in their train; and as to poor Louis XVI. at whose expence the whole was done, these gentlemen certainly thought that no name less than that of an emperor ought to be annexed to theirs. When inscriptions are fixed to public works, no names ought to be permitted but those of the king, whose merit patronizes, and of the engineer or artist whose genius executes the work. As to a mob of intendants, directors, and inspectors, let them be forgotten. The canal at this place is ten French feet wide and twelve high, hewn entirely out of the chalk rock, imbedded, in which are many flints—no masonry. There is only a small part finished of ten toises long for a pattern, twenty feet broad and twenty high. Five thousand toises are already done in the manner of that part which I viewed; and the whole distance under ground, when the tunnel will be complete, is 7020 toises (each six feet) or about nine miles. It has already cost 1,200,000 liv. (52,500l.) and there want 2,500,000 liv. (109,375l.) to complete it; so that the total estimate is near four millions. It is executed by shafts. At present there are not above five or six inches of water in it. This great work has stood still entirely since the administration of the Archbishop of Toulouze. When we see such works stand still for want of money, we shall reasonably be inclined to ask, What are the services that continue supplied? and to conclude, that amongst kings, and ministers, and nations, œconomy is the first virtue:—without it, genius is a meteor; victory a sound; and all courtly splendour a public robbery.

At

At Cambray, view the manufacture. These frontier towns of Flanders are built in the old style, but the streets broad, handsome, well paved, and lighted. I need not observe, that all are fortified, and that every step in this country has been rendered famous or infamous according to the feelings of the spectator, by many of the bloodiest wars that have disgraced and exhausted christendom. At the hotel de Bourbon I was well lodged, fed, and attended: an excellent inn.—22 miles.

The 2d. Pass Bouchaine to Valenciennes, another old town, which, like the rest of the Flemish ones, manifests more the wealth of former than of present times.—18 miles.

The 3d, to Orchees; and the 4th to Lisle, which is surrounded by more windmills for squeezing out the oil of coleseed, than are probably to be seen any where else in the world. Pass fewer drawbridges and works of fortification here than at Calais; the great strength of this place is in its mines and other *souteraines*. In the evening to the play.

The cry here for a war with England amazed me. Every one I talked with said, it was beyond a doubt the English had called the Prussian army into Holland; and that the motives in France for a war were numerous and manifest. It is easy enough to discover, that the origin of all this violence is the commercial treaty, which is execrated here, as the most fatal stroke to their manufactures they ever experienced. These people have the true monopolizing ideas; they would involve four-and-twenty millions of people in the certain miseries of a war, rather than see the interest of those who consume fabrics, preferred to the interest of those who make them. The advantages reaped by four-and-twenty millions of consumers are supposed to be lighter than a feather, compared with the inconveniences sustained by half a million of manufacturers. Meet many small carts in the town, drawn each by a dog: I was told by the owner of one, what appears to me incredible, that his dog would draw 700 lb. half a league. The wheels of these carts are very high, relative to the height of the dog, so that his chest is a good deal below the axle.

The 6th. In leaving Lisle, the reparation of a bridge made me take a road on the banks of the canal, close under the works of the citadel. They appear to be very numerous, and the situation exceedingly advantageous, on a gently rising ground, surrounded by low watry meadows, which may with ease be drowned. Pass Darmentiers, a large paved town. Sleep at Mont Cassel.—30 miles.

The 7th. Cassel is on the summit of the only hill in Flanders. They are now repairing the basin at Dunkirk, so famous in history for an imperiousness in England, which she must have paid dearly for. Dunkirk, Gibraltar, and the statue of Louis XIV. in the *Place de Victoire*, I place in the same political class of national arrogance. Many men are now at work on this basin, and, when finished, it will not contain more than twenty or twenty-five frigates; and appears to an unlearned eye, a ridiculous object for the jealousy of a great nation, unless it professed to be jealous of privateers.—I made enquiries concern-

ing

ing the import of wool from England, and was assured that it was a very trifling object. I may here observe, that when I left the town, my little cloak-bag was examined as scrupulously, as if I had just left England with a cargo of prohibited goods, and again at a fort two miles off. Dunkirk being a free port, the custom-house is at the gates. What are we to think of our woollen manufacturers in England, when suing for their wool-bill, of infamous memory, they brought one Thomas Wilkinson from Dunkirk quay, to the bar of the English House of Lords to *swear*, that wool passes from Dunkirk without entry, duty, or any thing being required, at double custom-houses, for a check on each other, where they examine even a cloak-bag? On such evidence, did our legislature, in the true shop-keeping spirit, pass an act of fines, pains, and penalties against all the wool-growers of England. Walk to Rosendal near the town, where Mons. le Brun has an improvement on the Dunes, which he very obligingly shewed me. Between the town and that place is a great number of neat little houses, built each with its garden, and one or two fields enclosed of most wretched blowing *dune* sand, naturally as white as snow, but improved by industry. The magic of PROPERTY turns sand to gold.—18 miles.

The 8th. Leave Dunkirk, where the *Concierge* a good inn, as indeed I have found all in Flanders. Pass Gravelline, which, to my unlearned eyes, seems the strongest place I have yet seen, at least the works above ground are more numerous than at any other. Ditches, ramparts, and drawbridges without end. This is a part of the art military I like: it implies defence. If Gengischan or Tamerlane had met with such places as Gravelline or Lille in their way, where would their conquests and extirpations of the human race have been?—Reach Calais. And here ends a journey which has given me a great deal of pleasure, and more information than I should have expected in a kingdom not so well cultivated as our own. It has been the first of my foreign travels; and has with me confirmed the idea, that to know our own country well, we must see something of others. Nations figure by comparison; and those ought to be esteemed the benefactors of the human race, who have most established public prosperity on the basis of private happiness. To ascertain how far this has been the case with the French, has been one material object of my tour. It is an enquiry of great and complex range; but a single excursion is too little to trust to. I must come again and again before I venture conclusions.—25 miles.

Wait at Desfains three days for a wind (the Duke and Dukes of Gloucester are in the same inn and situation) and for a packet. A captain behaved shabbily: deceived me, and was hired by a family that would admit nobody but themselves:—I did not ask what nation this family was of.—Dover—London—Bradfield;—and have more pleasure in giving my little girl a French doll, than in viewing Versailles.

1788.

THE long journey I had last year taken in France suggested a variety of reflections on the agriculture, and on the sources and progress of national prosperity in that kingdom; in spite of myself, these ideas fermented in my mind; and while I was drawing conclusions relative to the political state of that great country, in every circumstance connected with its husbandry, I found, at each moment of my reflection, the importance of making as regular a survey of the whole as was possible for a traveller to effect. Thus instigated, I determined to attempt finishing what I had fortunately enough begun.

JULY 30. Left Bradfield; and arrived at Calais.—161 miles.

AUGUST 5. The next day I took the road to St. Omers. Pass the bridge *Sans Pareil*, which serves a double purpose, passing two streams at once; but it has been praised beyond its merit, and cost more than it was worth. St. Omers contains little deserving notice; and, if I could direct the legislatures of England and Ireland, should contain still less:—why are catholics to emigrate in order to be ill educated abroad, instead of being allowed institutions that would educate them well at home? The country is seen to advantage from St. Bertin's steeple.—25 miles.

The 7th. The canal of St. Omers is carried up a hill by a series of sluices. To Aire, and Lilliers, and Bethune, towns well known in military story.—25 miles.

The 8th. The country changes, now a campaign; from Bethune to Arras an admirable gravel road. At the last town there is nothing but the great and rich abbey of Var, and this they would not shew me—it was not the right day—or some frivolous excuse. The cathedral is nothing.—17½ miles.

The 9th. Market-day; coming out of the town I met at least an hundred asses, some loaded with a bag, others a sack, but all apparently with a trifling burthen, and swarms of men and women. This is called a market, being plentifully supplied; but a great proportion of all the labour of a country is idle in the midst of harvest, to supply a town which in England would be fed by ¼ of the people: whenever this swarm of triflers buz in a market, I take a minute and vicious division of the soil for granted. Here my only companion *de voyage*, the English mare that carries me, discloses by her eye a secret not the most agreeable, that she is going rapidly blind. She is moon-eyed; but our fool of a Bury farrier assured me I was safe for above a twelvemonth. It must be confessed this is one of those agreeable situations which not many will believe a man would put himself into. *Ma foy!* this is a piece of my good luck;—the journey at best is but a drudgery, that others are paid for performing on a good horse, and I pay myself for doing it on a blind one;—I shall feel this inconvenience perhaps at the expence of my neck.—20 miles.

The 10th. To Amiens. Mr. Fox slept here last night, and it was amusing

ing to hear the conversation at the table d'hôte; they wondered that so great a man should not travel in a greater style:—I asked what was his style? Monsieur and Madame were in an English post-chaise, and the fille and valet de chambre in a cabriolet, with a French courier to have horses ready. What would they have? but a style both of comfort and amusement? A plague on a blind mare!—But I have worked through life; and he TALKS.

The 11th. By Poix to Aumale; enter Normandy.—25 miles.

The 12th. Thence to Newchatel, by far the finest country since Calais. Pass many villas of Rouen merchants.—40 miles.

The 13th. They are right to have country villas—to get out of this great ugly, stinking, close, and ill built town, which is full of nothing but dirt and industry. What a picture of new buildings does a flourishing and manufacturing town in England exhibit! The choir of the cathedral is surrounded by a most magnificent railing of solid brass. They shew the monument of Rollo, the first Duke of Normandy, and of his son; of William Longsword; also those of Richard Cœur de Lion; his brother Henry; the Duke of Bedford, regent of France; of their own King Henry V.; of the Cardinal d'Amboise, minister of Louis XII. The altar-piece is an adoration of the shepherds, by Philip of Champagne. Rouen is dearer than Paris, and therefore it is necessary for the pockets of the people that their bellies should be wholesomely pinched. At the table d'hôte, at the hotel *pomme du pin* we sat down, sixteen, to the following dinner, a soup, about 3lb. of bouilli, one fowl, one duck, a small fricassée of chicken, a *roté* of veal, of about 2lb. and two other small plates with a salad: the price 45*s.* and 20*s.* more for a pint of wine; at an ordinary of 20*d.* a head in England there would be a piece of meat which would, literally speaking, outweigh this whole dinner! The ducks were swept clean so quickly, that I moved from table without half a dinner. Such tables d'hôtes are among the cheap things of France! Of all *sombres* and *tristes* meetings a French table d'hôte is foremost; for eight minutes a dead silence, and as to the politeness of addressing a conversation to a foreigner, he will look for it in vain. Not a single word has any where been said to me unless to answer some question: Rouen not singular in this. The parliament-house here is shut up, and its members exiled a month past to their country seats, because they would not register the edict for a new land-tax. I enquired much into the common sentiments of the people, and found that the King personally from having been here, is more popular than the parliament, to whom they attribute the general dearness of every thing. Called on Mons. d'Ambournay, the author of a treatise on using madder green instead of dried, and had the pleasure of a long conversation with him on various farming topics, interesting to my enquiries.

The 14th. To Barentin, through abundance of apple and pear-trees, and a country better than the husbandry; to Yveot richer, but miserable management.—21 miles.

The 15th. Country the same to Bolbec; their inclosures remind me of Ireland, the fence is a high broad parapet bank, very well planted with hedges and oak and beech trees. All the way from Rouen there is a scattering of country seats, which I am glad to see; farm-houses and cottages every where, and the cotton manufacture in all. Continues the same to Harfleur. To Havre de Grace, the approach strongly marks a very flourishing place: the hills are almost covered with little new built villas, and many more are building; some are so close as to form almost streets, and considerable additions are also making to the town.—30 miles.

The 16th. Enquiries are not necessary to find out the prosperity of this town; it is nothing equivocal: fuller of motion, life, and activity, than any place I have been at in France. A house here, which in 1779 let without any fine on a lease of six years for 240 liv. per annum, was lately let for three years at 600 liv. which twelve years past was to be had at 24 liv. The harbour's mouth is narrow and formed by a mole, but it enlarges into two oblong basons of greater breadth; these are full of ships, to the number of some hundreds, and the quays around are thronged with business, all hurry, bustle, and animation. They say a fifty gun ship can enter, but I suppose without her guns. What is better, they have merchant-men of five and six hundred tons: the state of the harbour has however given them much alarm and perplexity; if nothing had been done to improve it, the mouth would have been filled up with sand, an increasing evil; to remedy which, many engineers have been consulted. The want of a back water to wash it out is so great, that they are now, at the King's expence, forming a most noble and magnificent work, a vast bason, walled off from the ocean, or rather an inclosure of it by solid masonry, 700 yards long, five yards broad, and 10 or 12 feet above the surface of the sea at high water; and for 400 yards more it consists of two exterior walls, each three yards broad, and filled up seven yards wide between them with earth; by means of this new and enormous bason, they will have an artificial back-water, capable, they calculate, of sweeping out the harbour's mouth clean from all obstructions. It is a work that does honour to the kingdom. The view of the Seine from this mole is striking; it is five miles broad, with high lands for its opposite shore; and the chalk cliffs and promontories, that recede to make way for rolling its vast tribute to the ocean, bold and noble.

Wait on Mons. l'Abbé Dicquemarre, the celebrated naturalist, where I had also the pleasure of meeting Mademoiselle le Masson le Golft, author of some agreeable performances; among others, *Entretien sur le Havre*, 1781, when the number of souls was estimated at 25,000. The next day Mons. le Reifeicourt, captain of the *corps royale du Genie*, to whom also I had letters, introduced me to Messrs. Hombergs, who are ranked amongst the most considerable mer-

chants of France. I dined with them at one of their country-houses, meeting a numerous company and splendid entertainment. These gentlemen have wives and daughters, cousins and friends, cheerful, pleasing, and well informed. I did not like the idea of quitting them so soon, for they seemed to have a society that would have made a longer residence agreeable enough. It is no bad prejudice surely to like people that like England; most of them have been there.—*Nous avons assurément en France de belles, d'agréables et de bonnes choses, mais on trouve une telle énergie dans votre nation* —.

The 18th. By the passage-packet, a decked vessel, to Honfleur, seven and a half miles, which we made with a strong north wind in an hour, the river being rougher than I thought a river could be. Honfleur is a small town, full of industry, and a basin full of ships, with some Guinea-men as large as at Havre. At Pont au de Mer, wait on Monf. Martin, director of the *manufacture royale* of leather. I saw eight or ten Englishmen that are employed here (there are 40 in all), and conversed with one from Yorkshire, who told me he had been deceived into coming; for though they are well paid, yet they find things very dear, instead of very cheap, as they had been given to understand.—20 miles.

The 19th. To Pont l'Eveque, towards which town the country is richer, that is, has more pasturage; the whole has singular features, composed of orchard inclosures, with hedges so thick and excellent, though composed of willow, with but a sprinkling of thorns, that one can scarcely see through them: chateaus are scattered, and some good, yet the road is villainous. Pont l'Eveque is situated in the Pays d'Auge, celebrated for the great fertility of its pastures. To Lisieux, through the same rich district, fences admirably planted, and the country thickly inclosed and wooded.—At the hotel d'Angleterre, an excellent inn, new, clean, and well furnished; and I was well served and well fed.—26 miles.

The 20th. To Caen; the road passes on the brow of a hill, that commands the rich valley of Corbon, still in the Pays d'Auge, the most fertile of the whole, all is under fine Poictu bullocks, which would figure in the counties of Leicester or Northampton.—28 miles.

The 21st. The Marquis de Guerchy, whom I had had the pleasure of seeing in Suffolk, being colonel of the regiment of Artois, quartered here, I waited on him; he introduced me to his lady, and remarked, that as it was the fair of Guibray, and himself going thither, I could not do better than accompany him, since it was the second fair in France. I readily agreed: in our way, we called at Bon, and dined with the Marquis of Turgot, elder brother of the justly celebrated comptroller-general: this gentleman is author of some memoirs on planting, published in the Trimestres of the Royal Society of Paris; he shewed and explained to us all his plantations, but chiefly prides himself on the exotics; and I was sorry to find in proportion not to their promised utility, but merely

to their rarity. I have not found this uncommon in France; and it is far from being so in England. I wished every moment for a long walk to change the conversation from trees to husbandry, and made many efforts, but all in vain. In the evening to the fair play-house—*Richard Cœur de Lion*; and I could not but remark an uncommon number of pretty women. Is there no antiquarian that deduces English beauty from the mixture of Norman blood? or who thinks, with Major Jardine, that nothing improves so much as crossing? to read his agreeable book of travels, one would think none wanted, and yet to look at his daughters, and hear their music, it would be impossible to doubt his system. Supped at the Marquis d'Ecougal's, at his chateau *a la Frenaye*. If these French marquisses cannot shew me good crops of corn and turnips, here is a noble one of something else—of beautiful and elegant daughters, the charming copies of an agreeable mother: the whole family I pronounced at the first sight amiable: they are chearful, pleasing, interesting: I want to know them better, but it is the fate of a traveller to meet opportunities of pleasure, and merely see to quit them. After supper, while the company were at cards, the marquis conversed on topics interesting to my enquiries.—22½ miles.

The 22d. At this fair of Guibray, merchandize is sold, they say, to the amount of six millions (262,500l.) but at that of Beaucaire to ten: I found the quantity of English goods considerable, hard and queen's ware; cloths and cottons. A dozen of common plain plates, 3 liv. and 4 liv. for a French imitation, but much worse; I asked the man (a Frenchman) if the treaty of commerce would not be very injurious with such a difference—*C'est précisément le contraire Monsr.—quelque mauvaise que soit cette imitation, on n'a encore rien fait d'aussi bien en France; l'année prochaine on fera mieux—nous perfectionnerons—et en fin nous l'emporterons sur vous.*—I believe he is a very good politician, and that, without competition, it is not possible to perfect any fabric. A dozen with blue or green edges, English, 5 liv. 5s. Return to Caen; dine with the Marquis of Guerchy, lieutenant-colonel, major, &c. of the regiment, and their wives present a large and agreeable company. View the Abbey of Benedictines, founded by William the Conqueror. It is a splendid building, substantial, massy, and magnificent, with very large apartments, and stone stair-cases worthy of a palace. Sup with Monsr. du Mesni, captain of the *corps de Genie*, to whom I had letters; he had introduced me to the engineer employed on the new port, which will bring ships of three or four hundred tons to Caen, a noble work, and among those which do honour to France.

The 23d. Monsr. de Guerchy and the Abbé de —, accompanied me to view Harcourt, the seat of the Duke d'Harcourt, governor of Normandy, and of the Dauphin; I had heard it called the finest English garden in France, but Ermenonville will not allow that claim, though not near its equal as a residence.

Found

Found at last a horse to try in order to prosecute my journey a little less like Don Quixotte, but it would by no means do; an uneasy stumbling beast, at a price that would have bought a good one; so my blind friend and I must jog on still further.—30 miles.

The 24th. To Bayeux; the cathedral has three towers, one of which is very light, elegant, and highly ornamented.

The 25th. In the road to Carentan, pass an arm of the sea at Isigny, which is fordable. At Carentan I found myself so ill, from accumulated colds I suppose, that I was seriously afraid of being laid up—not a bone without its aches; and a horrid dead leaden weight all over me. I went early to bed, washed down a dose of antimonial powders, which proved sudorific enough to let me prosecute my journey.—23 miles.

The 26th. To Volognes; thence to Cherbourg, a thick woodland, much like Suffex. The Marquis de Guerchy had desired me to call on Monf. Doumerc, a great improver at Pierbutté near Cherbourg, which I did; but he was then at Paris: however his bailiff, Monf. Baillio, with great civility shewed me the lands, and explained every thing.—30 miles.

The 27th. Cherbourg. I had letters to the Duke de Beuvron, who commands here; to the Count de Chavagnac, and M. de Meusnier, of the Academy of Sciences, and translator of Cook's Voyages; the count is in the country. So much had I heard of the famous works erecting to form a harbour here, that I was eager to view them without the loss of a moment: the duke favoured me with an order for that purpose; I therefore took a boat, and rowed across the artificial harbour formed by the celebrated cones. As it is possible that this itinerary may be read by persons that have not either time or inclination to seek other books for an account of these works, I will in a few words sketch the intention and execution. The French possess no port for ships of war from Dunkirk to Brest, and the former is capable of receiving frigates only. This deficiency has been fatal to them more than once in their wars with England, whose more favourable coast affords not only the Thames, but the noble harbour of Portsmouth. To remedy the want, they planned a mole across the open bay of Cherbourg; but to inclose a space sufficient to protect a fleet of the line, would demand so extended a wall, and so exposed to heavy seas, that the expence would be far too great to be thought of; and at the same time the success too dubious to be ventured. The idea of a regular mole was therefore given up, and a partial one, on a new plan, adopted; this was to erect in the sea, in a line where a mole is wanted, insulated columns of timber and masonry, of so vast a size, as to resist the violence of the ocean, and to break its waves sufficiently to permit a bank being formed between column and column. These have been called cones from their form. They are 140 feet diameter at the base; 60 diameter at the top, and 60 feet vertical height, being, when sunk in

in the sea, 30 to 34 feet, immersed at the low water of high tides. These enormous broad-bottomed tubs being constructed of oak, with every attention to strength and solidity, when finished for launching, were loaded with stone just sufficient for sinking, and in that state each cone weighed 1000 tons (of 2000 lb.) To float them, sixty empty casks, each of ten pipes, were attached around by cords, and in this state of buoyancy the enormous machine was floated to its destined spot, towed by numberless vessels, and before innumerable spectators. At a signal, the cords are cut in a moment, and the pile sinks: it is then filled instantly with stone from vessels ready attending, and capped with masonry. The contents of each filled to within four feet of the surface only, 2500 cubical toises of stone*. A vast number of vessels are then employed to form a bank of stone from cone to cone, visible at low water in neap tides. Eighteen cones, by one account, but 33 by another, would complete the work, leaving only two entrances, commanded by two very fine new-built forts, *Royale* and *d'Artois*, thoroughly well provided, it is said, (for they do not shew them,) with an apparatus for heating canon balls. The number of cones will depend on the distances at which they are placed. I found eight finished, and the skeleton frames of two more in the dock-yard; but all is stopped by the Archbishop of Toulouze, in favour of the æconomical plans at present in speculation. Four of them, the last sunk, being most exposed, are now repairing, having been found too weak to resist the fury of the storms, and the heavy westerly seas. The last cone is much the most damaged, and, in proportion as they advance, they will be still more and more exposed, which gives rise to the opinion of many skilful engineers, that the whole scheme will prove fruitless, unless such an expence is bestowed on the remaining cones as would be sufficient to exhaust the revenues of a kingdom. The eight already erected have for some years given a new appearance to Cherbourg; new houses, and even streets, and such a face of activity and animation, that the stop to the works was received with blank countenances. They say, that, quarry-men included, 3000 were employed. The effect of the eight cones already erected, and the bank of stone formed between them, has been to give perfect security to a considerable portion of the intended harbour. Two 40 gun ships have lain at anchor within them these eighteen months past, by way of experiment, and though such storms have happened in that time as have put all to severe trials, and, as I mentioned before, considerably damaged three of the cones, yet these ships have not received the smallest agitation; hence it is a harbour for a small fleet without doing more. Should they ever proceed with the rest of the cones, they must be built much stronger, perhaps larger, and far greater precautions taken in giving them firmness and solidity: it is also a

* The toise six feet.

question, whether they must not be sunk much nearer to each other; at all events, the proportional expence will be nearly doubled; but for wars with England, the importance of having a secure harbour, so critically situated, they consider as equal almost to any expence; at least this importance has its full weight in the eyes of the people of Cherbourg. I remarked, in rowing across the harbour, that while the sea without the artificial bar was so rough, that it would have been unpleasant for a boat, within it was quite smooth. I mounted two of the cones, one of which has this inscription:—*Louis XVI.—Sur ce premiere cône échoue le 6 Juin 1784, a vu l'immersion de celui de l'est, le 23 Juin 1786.*—On the whole, the undertaking is a prodigious one, and does no trifling credit to the spirit of enterprize of the present age in France. The service of the marine is a favourite; whether justly or not, is another question; and this harbour shews, that when this great people undertake any capital works, that are really favourites, they find inventive genius to plan, and engineers of capital talents to execute whatever is devised, in a manner that does honour to their kingdom. The Duke de Beuvron had asked me to dinner, but I found that if I accepted his invitation, it would then take me the next day to view the glass manufacture; I preferred therefore business to pleasure, and taking with me a letter from that nobleman to secure a sight of it, I rode thither in the afternoon; it is about three miles from Cherbourg. Monf. de Puye, the director, explained every thing to me in the most obliging manner. Cherbourg is not a place for a residence longer than necessary; I was here fleeced more infamously than at any other town in France; the two best inns were full; I was obliged to go to the *barque*, a vile hole, little better than a hog-sty; where, for a miserable dirty wretched chamber, two suppers composed chiefly of a plate of apples and some butter and cheese, with some trifle besides too bad to eat, and one miserable dinner, they brought me in a bill of 31 liv. (11. 7s. 1d.) they not only charged the room 3 liv. a night, but even the very stable for my horse, after enormous items for oats, hay, and straw. This is a species of profligacy which debases the national character. Calling, as I returned, on Monf. Baillo, I shewed him the bill, at which he exclaimed for imposition, and said the man and woman were going to leave off their trade; and no wonder, if they had made a practice of fleecing others in that manner. Let no one go to Cherbourg without making a bargain for every thing he has, even to the straw and stable; pepper, salt, and table-cloth.—10 miles.

The 28th, return to Carentan; and the 29th, pass through a rich and thickly inclosed country, to Coutances, capital of the district called the Cotentin. They build in this country the best mud houses and barns I ever saw, excellent habitations, even of three stories, and all of mud, with considerable barns and other offices. The earth (the best for the purpose is a rich brown loam) is well kneaded with straw; and being spread about four inches thick on the ground, is cut in squares

of

of nine inches, and these are taken with a shovel and tossed to the man on the wall who builds it; and the wall built, as in Ireland, in layers, each three feet high, that it may dry before they advance. The thickness about two feet. They make them project about an inch, which they cut off layer by layer perfectly smooth. If they had the English way of white-washing, they would look as well as our lath and plaster, and are much more durable. In good houses the doors and windows are in stone work.—20 miles.

The 30th. A fine sea view of the Isles of Chaufée, at five leagues distant; and afterwards Jersey, clear at about forty miles, with that of the town of Grand-val on a high peninsula: entering the town, every idea of beauty is lost; a close, nasty, ugly, ill built hole: market day, and myriads of triflers, common at a French market. The bay of Cancale, all along to the right, and St. Michael's rock rising out of the sea, conically, with a castle on the top, a most singular and picturesque object.—30 miles.

The 31st. At Pont Orfin, enter Bretagne; there seems here a more minute division of farms than before. There is a long street in the episcopal town of Doll, without a glass window; a horrid appearance. My entry into Bretagne gives me an idea of its being a miserable province.—22 miles.

SEPTEMBER 1st. To Combourg, the country has a savage aspect; husbandry not much further advanced, at least in skill, than among the Hurons, which appears incredible amidst inclosures; the people almost as wild as their country, and their town of Combourg one of the most brutal filthy places that can be seen; mud houses, no windows, and a pavement so broken, as to impede all passengers, but ease none—yet here is a chateau, and inhabited; who is this Monf. de Chateaubriant, the owner, that has nerves strung for a residence amidst such filth and poverty? Below this hideous heap of wretchedness is a fine lake, surrounded by well wooded inclosures. Coming out of Hedé, there is a beautiful lake belonging to Monf. de Blassac, intendant of Poitiers, with a fine accompaniment of wood. A very little cleaning would make here a delicious scenery. There is a chateau, with four rows of trees, and nothing else to be seen from the windows in the true French style. Forbid it, taste, that this should be the house of the owner of that beautiful water; and yet this Monf. de Blassac has made at Poitiers the finest promenade in France! But that taste which draws a strait line, and that which traces a waving one, are founded on feelings and ideas as separate and distinct as painting and music—as poetry or sculpture. The lake abounds with fish, pike to 36lb. carp to 24lb. perch 4lb. and tench 5lb. To Rennes the same strange wild mixture of desert and cultivation, half savage, half human.—31 miles.

The 2d. Rennes is well built, and has two good squares; that particularly of Louis XV. where is his statue. The parliament being in exile, the house

is not to be seen. The Benedictines garden, called the *Tabour*, is worth viewing. But the object at Rennes most remarkable at present is a camp, with a marshal of France (de Stainville,) and four regiments of infantry, and two of dragoons, close to the gates. The discontents of the people have been doubled, first on account of the high price of bread, and secondly for the banishment of the parliament. The former cause is natural enough; but why the people should love their parliament was what I could not understand, since the members, as well as of the states, are all noble, and the distinction between the *noblesse* and *roturiers* no where stronger, more offensive, or more abominable than in Bretagne. They assured me, however, that the populace have been blown up to violence by every art of deception, and even by money distributed for that purpose. The commotions rose to such a height before the camp was established, that the troops here were utterly unable to keep the peace. Mons. Argentaïse, to whom I had brought letters, had the goodness, during the four days I was here, to shew and explain every thing to be seen. I find Rennes very cheap; and it appears the more so to me just come from Normandy, where every thing is extravagantly dear. The table d'hôte, at the *grand maison*, is well served; they give two courses, containing plenty of good things, and a very ample regular dessert: the supper one good course, with a large joint of mutton, and another good dessert; each meal, with the common wine, 40*s*. and for 20 more you have very good wine, instead of the ordinary sort; 30*s*. for the horse: thus, with good wine, it is no more than 6 liv. 10*s*. a day, or 5*s*. 10*d*. Yet a camp of which they complain has raised prices enormously.

The 5th. To Montauban. The poor people seem poor indeed; the children terribly ragged, if possible worse clad than if with no cloaths at all; as to shoes and stockings they are luxuries. A beautiful girl of six or seven years playing with a stick, and smiling under such a bundle of rags as made my heart ache to see her: they did not beg, and when I gave them any thing, seemed more surprized than obliged. One third of what I have seen of this province seems uncultivated, and nearly all of it in misery. What have kings, and ministers, and parliaments, and states, to answer for, seeing millions of hands that would be industrious, yet idle and starving, through the execrable maxims of despotism, or the equally detestable prejudices of a feudal nobility? Sleep at the *lion d'or*, at Montauban, an abominable hole.—20 miles.

The 6th. The same inclosed country to Brooms; but near that town improves to the eye, from being more hilly. At the little town of Lamballe, there are above fifty families of noblesse that live in winter, who reside on their estates in the summer. There is probably as much soppery and nonsense in their circles, and for what I know as much happiness, as in those of Paris. Both would be better employed in cultivating their lands, and rendering the poor industrious.

—30 miles.

The

The 7th. Upon leaving Lamballe, the country immediately changes. The Marquis d'Urvoy, whom I met at Rennes, and who has a good estate at St. Bricux, gave me a letter for his agent, who answered my questions.—12½ miles.

The 8th. To Guingamp, a *sombre* inclosed country. Pass Chateaulandrin, and enter Bas Bretagne. One recognizes at once another people, meeting numbers who have not more French than *Je ne sais pas ce que vous dites*, or *Je n'entend rien*. Enter Guingamp by gateways, towers, and battlements, apparently of the oldest military architecture; every part denoting antiquity, and in the best preservation. The poor people's habitations are not so good; they are miserable heaps of dirt; no glass, and scarcely any light; but they have earth chimnies. I was in my first sleep at Belleisle, when the aubergiste came to my bedside, undrew a curtain, that I expected to cover me with spiders, to tell me that I had *une jument Angloise superbe*, and that a seigneur wished to buy it of me: I gave him half a dozen flowers of French eloquence for his impertinence, when he thought proper to leave me and his spiders at peace. There was a great *chasse* assembled. These Bas Bretagne seigneurs are capital hunters, it seems, who fix on a blind mare for an object of admiration. *A-propos* to the breeds of horses in France; this mare cost me twenty-three guineas when horses were dear in England, and had been sold for sixteen when they were rather cheaper; her figure may therefore be guessed; yet she was much admired, and often in this journey; and as to Bretagne, she rarely met a rival. That province, and it is the same in parts of Normandy, is infested in every stable with a pack of garran poney stallions, sufficient to perpetuate the miserable breed that is every where seen. This villainous hole, that calls itself the *grand maison*, is the best inn at a post town on the great road to Brest, at which marshals of France, dukes, peers, countesses, and so forth, must now and then, by the accidents to which long journeys are subject, have found themselves. What are we to think of a country that has made, in the eighteenth century, no better provision for its travellers!—30 miles.

The 9th. Morlaix is the most singular port I have seen. It has but one feature, a vale just wide enough for a fine canal with two quays, and two rows of houses; behind them the mountain rises steep, and woody on one side; on the other gardens, rocks, and wood; the effect romantic and beautiful. Trade now very dull, but flourished much in the war.—20 miles.

The 10th. Fair day at Landerviser, which gave me an opportunity of seeing numbers of Bas Bretons collected, as well as their cattle. The men dress in great trowser-like breeches, many with naked legs, and most with wooden shoes, strong marked features like the Welch, with countenances a mixture of half energy, half laziness; their persons stout, broad, and square. The women furrowed without age by labour, to the utter extinction of all softness of sex. The

eye discovers them at first glance to be a people absolutely distinct from the French. Wonderful that they should be found so, with distinct language, manners, dress, &c. after having been settled here 1300 years.—35 miles.

The 11th. I had respectable letters, and to respectable people at Brest, in order to see the dock-yard, but they were vain; *Monf. le Chevalier de Tredairné* particularly applied for me earnestly to the commandant, but the order, contrary to its being shewn either to Frenchmen or foreigners, was too strict to be relaxed without an express direction from the minister of the marine, given very rarely, and to which, when it does come, they pay but an unwilling obedience. *Monf. Tredairné*, however, informed me, that Lord Pembroke saw it not long since by means of such an order: and he remarked himself, knowing that I could not fail doing the same, that it was strange to shew the port to an English general and governor of Portsmouth, yet deny it to a farmer. He however assured me, that the Duke of Chartres went away but the other day without being permitted to see it. Gretry's music at the theatre, which, though not large, is neat and even elegant, was not calculated to put me in good humour; it was *Panurge*.—Brest is a well built town, with many regular and handsome streets, and the quay where many men of war are laid up, and other shipping, has much of that life and motion which animates a sea-port.

The 12th. Return to Landernau, where, at the *Duc de Chartres*, which is the best and cleanest inn in the bishopric, as I was a going to dinner, the landlord told me, there was a *Monsieur un homme comme il faut*, and the dinner would be better if we united; *de tout mon cœur*. He proved a Bas Breton noble, with his sword and a little miserable but nimble nag. This seigneur was ignorant that the Duke de Chartres, the other day at Brest, was not the duke that was in *Monf. d'Orvillier's* fleet. Take the road to Nantes.—25 miles.

The 13th. The country to Chateaulin more mountainous; one-third waste. All this region far inferior to Leon and Tragger; no exertions, nor any marks of intelligence, yet all near to the great navigation and market of Brest water, and the soil good. Quimper, though a bishopric, has nothing worth seeing but its promenades, which are among the finest in France.—25 miles.

The 14th. Leaving Quimper, there seem to be more cultivated features; but this only for a moment; wastes—wastes—wastes.—Reach Quimperlay.—27 miles.

The 15th. The same *sombre* country to l'Orient, but with a mixture of cultivation and much wood.—I found l'Orient so full of fools, gaping to see a man of war launched, that I could get no bed for myself, nor stable for my horse at the *epee royale*. At the *cheval blanc*, a poor hole, I got my horse crammed among twenty others, like herrings in a barrel, but could have no bed. The Duke de Brissac, with a suite of officers, had no better success. If the governor of Paris could not, without trouble, get a bed at l'Orient, no wonder Arthur

Young.

Young found obstacles. I went directly to deliver my letters, found *Monf. Befné*, a merchant, at home; he received me with a frank civility better than a million of compliments; and the moment he understood my situation, offered me a bed in his house, which I accepted. The *Tourville*, of 84 guns, was to be launched at three o'clock, but put off till the next day, much to the joy of the *aubergistes*, &c. who were well pleased to see such a swarm of strangers kept another day. I wished the ship in their throats, for I thought only of my poor mare being squeezed a night among the *Bretagne* garrans; sixpence; however, to the *garçon*, had effects marvellously to her ease. The town is modern, and regularly built, the streets diverge in rays from the gate, and are crossed by others at right angles, broad, handsomely built, and well paved; with many houses that make a good figure. But what makes *l'Orient* more known, is, being the appropriated port for the commerce of India, containing all the shipping and magazines of the company. The latter are truly great, and speak the royal munificence from which they arose. They are of several stories, and all vaulted in stone, in a splendid style, and of vast extent. But they want, at least at present, like so many other magnificent establishments in France, the vigour and vivacity of an active commerce. The business transacting here seems trifling. Three 84 gun ships, the *Tourville*, *l'Eole*, and *Jean Bart*, with a 32 gun frigate, are upon the stocks. They assured me, that the *Tourville* has been only nine months building: the scene is alive, and fifteen large men of war being laid up here in ordinary, with some *Indiamen* and a few traders, render the port a pleasing spectacle. There is a beautiful round tower, 100 feet high, of white stone, with a railed gallery at top; the proportions light and agreeable; it is for looking out and making signals. My hospitable merchant I find a plain unaffected character, with some whimsical originalities, that make him more interesting; he has an agreeable daughter, who entertains *we* with singing to her harp. The next morning the *Tourville* quitted her stocks, to the music of the regiments, and the shouts of thousands collected to see it. Leave *l'Orient*. Arrive at *Hennebon*.—7½ miles.

The 17th. To *Auray*, the eighteen poorest miles I have yet seen in *Bretagne*. Good houses of stone and slate, without glass. *Auray* has a little port, and some sloops, which always give an air of life to a town. To *Vannes*, the country varied, but *landes* the more permanent feature. *Vannes* is not an inconsiderable town, but its greatest beauty is its port and promenade.

The 18th. To *Musiliac*. *Belleisle* with the smaller ones, *d'Hedic* and *d'Honat*, are in sight. *Musiliac*, if it can boast of nothing else, may at least vaunt its cheapness. I had for dinner two good flat fish, a dish of oysters, soup, a fine duck roasted; with an ample dessert of grapes, pears, walnuts, biscuits, liqueur, and a pint of good *Bourdeaux* wine: my mare, besides hay, had three-fourths

fourths of a peck of corn, and the whole 56*s.* 2*s.* to the fille and two to the garçon, in all 2*s.* 6*d.* Pass *landes—landes—landes—to* la Roche Bernard. The view of the river Villaine is beautiful from the boldness of the shores; there are no insipid flats; the river is two-thirds of the width of the river Thames at Westminster, and would be equal to any thing in the world if the shores were woody, but they are the savage wastes of this country.—33 miles.

The 19th. Turned aside to Auvergnac, the seat of the Count de la Bourdonaye, to whom I had a letter from the Duchess d'Anville, as a person able to give me every species of intelligence relative to Bretagne, having for five-and-twenty years been first syndic of the noblesse. A fortuitous jumble of rocks and steeples could scarcely form a worse road than these five miles: could I put as much faith in two bits of wood laid over each other, as the good folks of the country do, I should have crossed myself, but my blind friend, with the most incredible sure-footedness, carried me safe over such places, that if I had not been in the constant habit of the saddle, I should have shuddered at, though guided by eyes keen as Eclipse's; for I suppose a fine racer, on whose velocity so many fools have been ready to lose their money, must have good eyes, as well as good legs. Such a road, leading to several villages, and one of the first noblemen of the province, shews what the state of society must be;—no communication—no neighbourhood—no temptation to the expences which flow from society; a mere seclusion to save money in order to spend it in towns. The count received me with great politeness; I explained to him my plan and motives for travelling in France, which he was pleased very warmly to approve, expressing his surprise that I should attempt so large an undertaking, as such a survey of France, unsupported by my government; I told him he knew very little of our government, if he supposed they would give a shilling to any agricultural project or projector; that whether the minister were whig or tory made no difference, the party of THE PLOUGH never yet had one on its side; and that England has had many Colberts, but not one Sully. This led to much interesting conversation on the balance of agriculture, manufactures, and commerce, and on the means of encouraging them; and, in reply to his enquiries, I made him understand their relations in England, and how our husbandry flourished in spite of our ministers, merely by the protection which civil liberty gives to property: and consequently that it was in a poor situation, comparatively with what it would have been in, had it received the same attention as manufactures and commerce. I told M. de la Bourdonaye that his province of Bretagne seemed to me to have nothing in it but privileges and poverty; he smiled, and gave me some explanations that are important; but no nobleman can ever probe this evil as it ought to be done, resulting as it does from the privileges going to themselves, and the poverty to the people. He shewed me his plantations, which are very fine and well thriven, and

and shelter him thoroughly on every side, even from the S. W. so near to the sea; from his walks we see Belleisle and its neighbours, and a little isle or rock belonging to him, which he says the King of England took from him after Sir Edward Hawke's victory, but that his majesty was kind enough to leave him his island after one night's possession.—20 miles.

The 20th. Take my leave of Monsieur and Madame de la Bourdonaye, to whose politeness as well as friendly attentions I am much obliged. Towards Nazaire there is a fine view of the mouth of the Loire, from the rising grounds, but the headlands that form the embouchure are low, which takes off from that greatness of the effect which highlands give to the mouth of the Shannon. The swelling bosom of the Atlantic boundless to the right. Savanal is poverty itself.—33 miles.

The 21st. Come to an improvement in the midst of these deserts, four good houses of stone and slate, and a few acres run to wretched grass, which have been tilled, but all savage, and become almost as rough as the rest. I was afterwards informed that this improvement, as it is called, was wrought by Englishmen, at the expence of a gentleman they ruined as well as themselves.—I demanded how it had been done? Pare and burn, and sow wheat, then rye, and then oats. Thus it is for ever and ever! the same follies, the same blundering, the same ignorance; and then all the fools in the country said, as they do now, that these wastes are good for nothing. To my amazement find the incredible circumstance, that they reach within three miles of the great commercial city of Nantes! This is a problem and a lesson to work at, but not at present. Arrive—go to the theatre, new built of fine white stone, having a magnificent portico of eight elegant Corinthian pillars in front, and four others, to separate the portico from a grand vestibule. Within all is gold and painting, and a *coup d'œil* at entering, that struck me forcibly. It is, I believe, twice as large as Drury-Lane, and five times as magnificent. It was Sunday, and therefore full. *Mon Dieu!* cried I to myself, do all the wastes, the deserts, the heath, ling, furz, broom, and bog, that I have passed for 300 miles, lead to this spectacle? What a miracle, that all this splendour and wealth of the cities in France should be so unconnected with the country! There are no gentle transitions from ease to comfort, from comfort to wealth: you pass at once from beggary to profusion, —from misery in mud cabins to Mademoiselle St. Huberti in splendid spectacles at 500 liv. a night (21l. 17s. 6d.) The country deserted, or if a gentleman in it, you find him in some wretched hole, to save that money which is lavished with profusion in the luxuries of a capital.—20 miles.

The 22d. Deliver my letters. As much as agriculture is the chief object of my journey, it is necessary to acquire such intelligence of the state of commerce, as can be best done from merchants, for abundance of useful information is to be

be gained, without putting any questions that a man would be cautious of answering, and even without putting any questions at all. Monf. Riédy was very polite, and fatisfied many of my enquiries; I dined once with him, and was pleased to find the conversation take an important turn on the relative situations of France and England in trade, particularly in the West-Indies. I had a letter also to Monf. Epivent, *conseiller* in the parliament of Rennes, whose brother, Monf. Epivent de la Villeboisnet, is a very considerable merchant here. It was not possible for any person to be more obliging than these two gentlemen; their attentions to me were marked and friendly, and rendered a few days residence here equally instructive and agreeable. The town has that sign of prosperity of new buildings, which never deceives. The quarter of the *comédie* is magnificent, all the streets at right angles and of white stone. I am in doubt whether the *hotel de Henri IV.* is not the finest inn in Europe: Dessen's at Calais is larger, but neither built, fitted up, nor furnished like this, which is new. It cost 400,000 liv. (17,500 l. furnished, and is let at 14,000 liv. per ann. (612l. 10s.) with no rent for the first year. It contains 60 beds for masters, and 25 stalls for horses. Some of the apartments of two rooms, very neat, are 6 liv. a day; one good 3 liv. but for merchants 5 liv. per diem for dinner, supper, wine, and chamber, and 35 s. for his horse. It is, without comparison, the first inn I have seen in France, and very cheap. It is in a small square close to the theatre, as convenient for pleasure or trade as the votaries of either can wish. The theatre cost 450,000 liv. and lets to the comedians at 17,000 liv. a year; it holds, when full, to the value of 120 louis d'or. The land the inn stands on was bought at 9 liv. a foot: in some parts of the city it sells as high as 15 liv. This value of the ground induces them to build so high as to be destructive of beauty. The quay has nothing remarkable; the river is choaked with islands, but at the furthest part next to the sea is a large range of houses regularly fronted. An institution common in the great commercial towns of France, but particularly flourishing in Nantes, is a *chambre de lecture*, or what we should call a book-club, that does not divide its books, but forms a library. There are three rooms, one for reading, another for conversation, and the third is the library; good fires in winter are provided, and wax candles. Messrs. Epivent had the goodness to attend me on a water expedition, to view the establishment of Mr. Wilkinson, for boring cannon, in an island in the Loire below Nantes. Until that well known English manufacturer arrived, the French knew nothing of the art of casting cannon solid, and then boring them. Mr. Wilkinson's machinery, for boring four cannons, is now at work, moved by tide wheels; but they have erected a steam engine, with a new apparatus for boring seven more; M. de la Motte, who has the direction of the whole, shewed us also a model of this engine, about six feet long, five high, and four or five broad; which he worked for

for us, by making a small fire under the boiler that is not bigger than a large tea-kettle; one of the best machines for a travelling philosopher that I have seen. Nantes is as *enflammée* in the cause of liberty, as any town in France can be; the conversations I witnessed here prove how great a change is effected in the minds of the French, nor do I believe it will be possible for the present government to last half a century longer, unless the clearest and most decided talents be at the helm. The American revolution has laid the foundation of another in France, if government do not take care of itself*. Upon the 23d one of the twelve prisoners from the Bastile arrived here—he was the most violent of them all—and his imprisonment has been far enough from silencing him.

The 25th. It was not without regret that I quitted a society both intelligent and agreeable, nor should I feel comfortably if I did not hope to see Messrs. Epivents again; I have little chance of being at Nantes, but if they come a second time to England, I have a promise of seeing them at Bradfield. The younger of these gentlemen spent a fortnight with Lord Shelburne at Bowood, which he remembers with much pleasure; Colonel Barré and Dr. Priestley were there at the same time. To Ancenis is all inclosed: for seven miles many feats.— $22\frac{1}{2}$ miles.

The 26th. To the scene of the vintage I had not before been witness to so much advantage as here; last autumn the heavy rains made it a melancholy business. At present, all is life and activity. The country all thickly and well inclosed. Glorious view of the Loire from a village, the last of Bretagne, where is a great barrier across the road and custom-houses, to search every thing coming thence. The Loire here takes the appearance of a lake large enough to be interesting. There is on both sides an accompaniment of wood, which is not universal on this river. The addition of towns, steeples, wind-mills, and a great range of lovely country, covered with vines; the character gay as well as noble. Enter Anjou. Pass St. George. For ten miles quit the Loire and meet it again at Angers. Letters from Monf. de Brouffonet; but he is unable to inform me in what part of Anjou was the residence of the Marquis de Tourbilly; to find out that nobleman's farm, where he made those admirable improvements, which he describes in the *Memoire sur les defrichemens*, was such an object to me, that I was determined to go to the place, let the distance out of my way be what it might.—30 miles.

The 27th. Among my letters, one to Monf. de la Livoniere, perpetual secretary of the Society of Agriculture here. I found he was at his country-seat, two leagues off at Mignianne. On my arrival, he was sitting down to dinner

* It wanted no great spirit of prophecy to foretel this; but latter events have shewn that I was very wide of the mark when I talked of fifty years.

with his family; not being past twelve, I thought to have escaped this awkwardness; but both he himself and Madame prevented all embarrassment by very unaffectedly desiring me to partake with them; and making not the least derangement either in table or looks, placed me at once at my ease, to an indifferent dinner, garnished with so much cheerfulness, that I found it a repast more to my taste than the most splendid tables could afford. An English family in the country, similar in situation, taken unawares in the same way, would receive you with an unquiet hospitality, and an anxious politeness; and after waiting for a hurry-scurry derangement of cloth, table, plates, sideboard, pot, and spit, would give you perhaps so good a dinner, that none of the family, between anxiety and fatigue, could supply one word of conversation, and you would depart under cordial wishes that you might never return. This folly, so common in England, is never met with in France: the French are quiet in their houses, and do things without effort.—Mons. Livoniere conversed with me much on the plan of my travels, which he commended greatly, but thought it very extraordinary that neither government, nor the Academy of Sciences, nor the Academy of Agriculture, should at least be at the expence of my journey. This idea is purely French; they have no notion of private people going out of their way for the public good, without being paid by the public; nor could he well comprehend me, when I told him that every thing is well done in England, except what is done with public money. I was greatly concerned to find that he could give no intelligence concerning the residence of the late Marquis de Tourbilly, as it would be a provoking circumstance to pass through all the province without finding his house, and afterward hear perhaps that I had been ignorantly within a few miles of it. In the evening return to Angers.—20 miles.

The 28th. To La Flèche. The chateau of Duretal, belonging to the Duchess d'Estissac, is boldly situated above the little town of that name, and on the banks of a beautiful river, the slopes to which that hang to the south are covered with vines. The country cheerful, dry, and pleasant for residence. I enquired here of several gentlemen for the residence of the Marquis de Tourbilly, but all in vain. The 30 miles to La Flèche the road is a noble one, of gravel, smooth, and kept in admirable order. La Flèche is a neat, clean, little town, not ill built, on the navigable river that flows to Duretal; but the trade is inconsiderable. My first business here, as every where else in Anjou, was to enquire for the residence of the Marquis de Tourbilly. I repeated my enquiries till I found that there was a place not far from La Flèche, called Tourbilly, but not what I wanted, as there was no Mons. de Tourbilly there, but a Marquis de Galway, who inherited Tourbilly from his father. This perplexed me more and more; and I renewed my enquiries with so much eagerness, that several people, I believe, thought me half mad. At last I met with

an ancient lady who solved my difficulty; she informed me, that Tourbilly, about twelve miles from La Flèche, was the place I was in search of: that it belonged to the marquis of that name, who had written some books she believed; that he died twenty years ago insolvent; that the father of the present Marquis de Galway bought the estate. This was sufficient for my purpose; I determined to take a guide the next morning, and, as I could not visit the marquis, at least see the remains of his improvements. The news, however, that he died insolvent, hurt me very much; it was a bad commentary on his book, and I foresaw, that whoever I should find at Tourbilly, would be full of ridicule on a husbandry that proved the loss of the estate on which it was practised.—30 miles.

The 29th. This morning I executed my project; my guide was a countryman with a good pair of legs, who conducted me across a range of such ling wastes as the marquis speaks of in his memoir. They appear boundless here; and I was told that I could travel many—many days, and see nothing else: what fields of improvement to make, not to lose estates! At last we arrived at Tourbilly, a poor village, of a few scattered houses, in a vale between two rising grounds, which are yet heath and waste; the chateau in the midst, with plantations of fine poplars leading to it. I cannot easily express the anxious inquisitive curiosity I felt to examine every scrap of the estate; no hedge or tree, no bush but what was interesting to me; I had read the translation of the marquis's history of his improvements in Mr. Mill's husbandry, and thought it the most interesting morsel I had met with, long before I procured the original *Memoire sur les defrichemens*; and determined, that if ever I should go to France, to view improvements the recital of which had given me such pleasure. I had neither letter nor introduction to the present owner, the Marquis de Galway. I therefore stated to him the plain fact, that I had read Mons. de Tourbilly's book with so much pleasure, that I wished much to view the improvements described in it; he answered me directly in good English, received me with such cordiality of politeness, and such expressions of regard for the purport of my travels, that he put me perfectly in humour with myself, and consequently with all around me. He ordered breakfast *a l'Anglois*; gave orders for a man to attend us in our walk, who I desired might be the oldest labourer to be found of the late Marquis de Tourbilly's. I was pleased to hear that one was alive who had worked with him from the beginning of his improvement. At breakfast Mons. de Galway introduced me to his brother, who also spoke English, and regretted that he could not do the same to Madame de Galway, who was confined to her chamber: he then gave me an account of his father's acquiring the estate and chateau of Tourbilly. His great-grand-father came to Bretagne with King James II. when he fled from the English throne; some of the same family are still living in the

county of Cork, particularly at Lotta. His father was famous in that province for his skill in agriculture; and, as a reward for an improvement he had wrought on the *landes*, the states of the province gave him a waste tract in the island of Belleisle, which at present belongs to his son. Hearing that the Marquis de Tourbilly was totally ruined, and his estates in Anjou to be sold by the creditors, he viewed them, and finding the land very improveable, made the purchase, giving about 15,000 louis d'ors for Tourbilly, a price which made the acquisition highly advantageous, notwithstanding his having bought some law-suits with the estate. It is about 3000 arpents, nearly contiguous, the seigneurie of two parishes, with the *haute justice*, &c. a handsome, large, and convenient chateau, offices very compleat, and many plantations, the work of the celebrated man concerning whom my enquiries were directed. I was almost breathless on the question of so great an improver being ruined! "You are unhappy that a man should be ruined by an art you love so much." Precisely so. But he eased me in a moment, by adding, that if the marquis had done nothing but farm and improve, he had never been ruined. One day, as he was boring to find marl, his ill stars discovered a vein of earth, perfectly white, which on trial did not effervesce with acids. It struck him as an acquisition for porcelain—he shewed it to a manufacturer—it was pronounced excellent: the marquis's imagination took fire, and he thought of converting the poor village of Tourbilly into a town, by a fabric of china—he went to work on his own account—raised buildings—and got together all that was necessary, except skill and capital.—In fine, he made good porcelain, was cheated by his agents, and people, and at last ruined. A soap manufactory, which he established also, as well as some law-suits relative to other estates, had their share in causing his misfortunes: his creditors seized the estate, but permitted him to administer it till his death, when it was sold. The only part of the tale that lessened my regret was, that, though married, he left no family; so that his ashes will sleep in peace, without his memory being reviled by an indigent posterity. His ancestors acquired the estate by marriage in the fourteenth century. His agricultural improvements, Monsr. Galway observed, certainly did not hurt him; they were not well done, nor well supported by himself, but they rendered the estate more valuable; and he never heard that they had brought him into any difficulties. I cannot but observe here, that there seems a fatality to attend country gentlemen whenever they attempt trade or manufactures. In England I never knew a man of landed property, with the education and habits of landed proprietors, attempt either, but they were infallibly ruined; or, if not ruined, considerably hurt by them. Whether it be that the ideas and principles of trade have something in them repugnant to the sentiments which *ought* to flow from education—or whether the habitual inattention of country gentlemen

to small gains and savings, which are the soul of trade, render their success impossible; from whatever it may arise, the fact is, not one in a million succeeds. Agriculture, in the improvement of their estates, is the only proper and legitimate sphere of their industry; and though ignorance renders this sometimes dangerous, yet they can with safety attempt no other. The old labourer, whose name is Piron (as propitious I hope to farming as to wit), being arrived, we sallied forth to tread what to me was a sort of classic ground. I shall dwell but little on the particulars: they make a much better figure in the *Memoire sur les defrichemens* than at Tourbilly; the meadows, even near the chateau, are yet very rough; the general features are rough: but the alleys of poplars, of which he speaks in the memoirs, are nobly grown indeed, and do credit to his memory; they are 60 or 70 feet high, and in girth a foot: the willows are equal. Why were they not oak? to have transmitted to the farming travellers of another century the pleasure I feel in viewing the more perishable poplars of the present time—the causeways near the castle must have been arduous works. The mulberries are in a state of neglect; Mons. Galway's father not being fond of that culture, destroyed many, but some hundreds remain, and I was told that the poor people had made as far as 25lb. of silk, but none attempted at present. The meadows had been drained and improved near the chateau to the amount of 50 or 60 arpents, they are now rushy, but yet valuable in such a country. Near them is a wood of Bourdeaux pines, sown 35 years ago, and now worth five or six liv. each. I walked into the boggy bit that produced the great cabbages he mentioned, it joins a large and most improveable bottom. Piron informed me that the marquis pared and burnt about 100 arpents in all, and folded 250 sheep. On our return to the chateau, Mons. de Galway, finding what an enthusiast I was in agriculture, searched among his papers to find a manuscript of the Marquis de Tourbilly's, written with his own hand, which he had the goodness to make me a present of, and which I shall keep amongst my curiosities in agriculture. The polite reception I had met from Mons. Galway, and the friendly attention he had given to my views, entering into the spirit of my pursuit, and wishing to promote it, would have induced me very cheerfully to have accepted his invitation of remaining some days with him; had I not been apprehensive that the moment of Madame Galway's being in bed, would render such an unlooked for visit inconvenient. I took my leave therefore in the evening, and returned to La Flèche by a different road.—25 miles.

The 30th. A quantity of moors to Le Mans; they assured me at Guerces, that they are here 60 leagues in circumference, with no great interruptions. At Le Mans I was unlucky in Mons. Tournai, secretary to the Society of Agriculture, being absent.—28 miles.

OCTOBER 1. Towards Alençon, the country a contrast to what I passed yesterday; good land, well inclosed, well built, and tolerably cultivated, with marling.

marling. A noble road of dark coloured stone, apparently ferruginous, that binds well. Near Beaumont vineyards in sight on the hills, and these are the last in thus travelling northwards; the whole country finely watered by rivers and streams, yet no irrigation.—30 miles.

The 2d. Four miles to Nouant, of rich herbage, under bullocks.—28 miles.

The 3d. From Gacé towards Bernay. Pass the Marechal Duc de Broglio's chateau at Broglio, which is surrounded by such a multiplicity of clipt hedges, double, treble, and quadruple, that he must half maintain the poor of the little town by clipping.—25 miles.

The 4th. Leave Bernay; where, and at other places in this country, are many mud walls, made of rich red loam, thatched at top, and well planted with fruit trees: a hint very well worth copying in England, where brick and stone are dear. Come to one of the richest countries in France, or indeed in Europe. There are few finer views than the first of Elbeuf, from the eminence above it, which is high; the town at your feet in the bottom; on one side the Seine presents a noble reach, broken by wooded islands, and an immense amphitheatre of hill, covered with a prodigious wood, surrounding the whole.

The 5th. To Rouen, where I found the *hotel royal*, a contrast to that dirty, impertinent, cheating hole the *pomme de pin*. In the evening to the theatre, which is not so large I think as that of Nantes, but not comparable in elegance or decoration; it is *sombre* and dirty. Gretry's *Caravanne de Caire*, the music of which, though too much chorus and noise, has some tender and pleasing passages. I like it better than any other piece I have heard of that celebrated composer. The next morning waited on Monsr. Scanegatty, *professeur de physique dans la Société Royale d'Agriculture*; he received me with politeness. He has a considerable room furnished with mathematical and philosophical instruments and models. He explained some of the latter to me that are of his own invention, particularly one of a furnace for calcining gypsum, which is brought here in large quantities from Montmartre. Waited on Messrs. Midy, Roffec and Co. the most considerable wool merchants in France, who were so kind as to shew me a great variety of wools, from most of the European countries, and permitted me to take specimens. The next morning I went to Darnetal, where Monsr. Curmer shewed me his manufacture. Return to Rouen, and dined with Monsr. Portier, *directeur general des fermes*, to whom I had brought a letter from the Duc de la Rochefoucauld. The conversation turned, among other subjects, on the want of new streets at Rouen, on comparison with Havre, Nantes, and Bourdeaux; at the latter places it was remarked, that a merchant makes a fortune in ten or fifteen years, and builds; but at Rouen, it is a commerce of œconomy, in which a man does not grow rich so soon, and therefore unable with prudence to make the same exertions. Every person at table agreed in another point which was discussed, that the wine provinces are the poorest in all France: I urged the
produce

produce being greater per arpent by far than of other lands; they insisted however on the fact as generally known and admitted. In the evening at the theatre, Madame du Fresne entertained me greatly; she is an excellent actress, never overdoes her parts, and makes one feel by feeling herself. The more I see of the French theatre, the more I am forced to acknowledge the superiority to our own, in the number of good performers, and in the fewness of bad ones; and in the quantity of dancers, singers, and persons on whom the business of the theatre depends, all established on a great scale. I remark, in the sentiments that are applauded, the same generous feelings in the audience in France, that have many times in England put me in good humour with my countrymen. We are too apt to hate the French; for myself I see many reasons to be pleased with them; attributing faults very much to their government; perhaps in our own, our roughness and want of good temper are to be traced to the same origin.

The 8th. My plan had for some time been to go directly to England, on leaving Rouen, for the post-offices had been cruelly uncertain. I had received no letters for some time from my family, though I had written repeatedly to urge it; they passed to a person at Paris who was to forward them; but some carelessness, or other cause, impeded all, at a time that others, directed to the towns I passed, came regularly; I had fears that some of my family were ill, and that they would not write bad news to me in a situation where knowing the worst could have no influence in changing it for better. But the desire I had to accept the invitation to La Roche Guyon, of the Dukes d'Anville and the Duc de la Rochefoucauld, prolonged my journey, and I set forward on this further excursion. A truly noble view from the road above Rouen; the city at one end of the vale, with the river flowing to it perfectly chequered with isles of wood. The other divides into two great channels, between which the vale is all spread with islands, some arable, some meadow, and much wood on all. Pass Pont l'Arch to Louviers. I had letters for the celebrated manufacturer Mons. Decretot, who received me with a kindness that ought to have some better epithet than polite; he shewed me his fabric, unquestionably the first woollen one in the world, if success, beauty of fabric, and an inexhaustible invention to supply with taste all the cravings of fancy, can give the merit of such superiority. Perfection goes no further than the Vigonia cloths of Mons. Decretot, at 110 liv. (4l. 16s. 3d.) the aulne. He shewed me his cotton-mills also, under the direction of two Englishmen. Near Louviers is a manufacture of copper-plates for the bottoms of the King's ships; a colony of Englishmen. I supped with Mons. Decretot, passing a very pleasant evening in the company of some agreeable ladies.—17 miles.

The 9th. By Gaillon to Vernon; the vale flat rich arable. Among the notes I had long ago taken of objects to see in France, was the plantation of mulberries,

mulberries, and the silk establishment of the Marechal de Belleisle, at Bissy, near Vernon; the attempts repeatedly made by the society for the encouragement of arts, at London, to introduce silk into England, had made the similar undertakings in the north of France more interesting. I accordingly made all the enquiries that were necessary for discovering the success of this meritorious attempt. Bissy is a fine place, purchased on the death of the Duc de Belleisle by the Duc de Penthièvre, who has but one amusement, which is that of varying his residence at the numerous seats he possesses in many parts of the kingdom. There is something rational in this taste; I should like myself to have a score of farms from the vale of Valencia to the Highlands of Scotland, and to visit and direct their cultivation by turns. From Vernon, cross the Seine, and mount the chalk hills again; after which to La Roche Guyon, the most singular place I have seen. Madame d'Anville and the Duc de la Rochefoucauld received me in a manner that would have made me pleased with the place had it been in the midst of a bog. It gave me pleasure to find also the Duchesses de la Rochefoucauld here, with whom I had passed so much agreeable time at Bagneres de Luchon, a thoroughly good woman, with that simplicity of character, which is too often banished by pride of family or foppery of rank. The Abbé Rochon, the celebrated astronomer, of the Academy of Sciences, with some other company, which, with the domestics and trappings of a grand seigneur, gave La Roche Guyon exactly the resemblance of the residence of a great lord in England. Europe is now so much assimilated, that if one go to a house where the fortune is 15 or 20,000*l.* a-year, we shall find in the mode of living much more resemblance than a young traveller will ever be prepared to look for.—23 miles.

The 10th. This is one of the most singular places I have been at. The chalk rock has been cut perpendicularly, to make room for the chateau. The kitchen, which is a large one, vast vaults, and extensive cellars (which, by the way, are magnificently filled), with various other offices, are all cut out of the rock, with merely fronts of brick; the house is large, containing thirty-eight apartments. The present duchess has added a handsome saloon of forty-eight feet long, and well proportioned, with four fine tablets of the Gobelin tapestry, also a library well filled. Here I was shewn the ink-stand that belonged to the famous Louvois, the minister of Louis XIV. known to be the identical one from which he signed the revocation of the edict of Nantes, and I suppose also the order to Turenne to burn the Palatinate. This Marquis de Louvois was grandfather to the two Duchesses d'Anville and d'Estillac, who inherited all his estate, as well as their own family fortune of the house of La Rochefoucauld, from which family I conceive, and not from Louvois, they inherited their dispositions. From the principal apartment, there is a balcony that leads

leads to the walks which serpentine up the mountain. Like most French seats, there is a town, and a great *potager* to remove, before it would be consonant with English ideas. Bissy, the Duc de Penthievre's, is just the same; before the chateau there is a gently falling vale with a little stream through it, that admits of the greatest improvements in respect to lawn and water, but in full front of the house they have placed a great kitchen-garden, with walls enough for a fortress. The houses of the poor people here, as on the Loire in Touraine, are burrowed into the chalk rock, and have a singular appearance: here are two streets of them, one above another; they are asserted by some to be wholesome, warm in winter, and cool in summer; but others thought they were bad for the health of the inhabitants. The Duc de la Rochefoucauld had the kindness to order his steward to give me all the information I wanted relative to the agriculture of the country, and to speak to such persons as were necessary on points that he was in doubt about. At an English nobleman's house, there would have been three or four farmers asked to meet me, who would have dined with the family amongst ladies of the first rank. I do not exaggerate, when I say, that I have had this at least an hundred times in the first houses of our islands. It is, however, a thing that, in the present state of manners in France, would not be met with from Calais to Bayonne, except by chance in the house of some great lord that had been much in England*, and then not unless it were asked for. The nobility in France have no more idea of practising agriculture, and making it an object of conversation, except on the mere theory, as they would speak of a loom or a bowsprit, than of any other object the most remote from their habits and pursuits. I do not so much blame them for this neglect, as I do that herd of visionary and absurd writers on agriculture, who, from their chambers in cities, have, with an impertinence almost incredible, deluged France with nonsense and theory, enough to disgust and ruin the whole nobility of the kingdom.

The 12th. Part with regret from a society I had every reason to be pleased with.—35 miles.

The 13th. The 20 miles to Rouen, the same features. First view of Rouen sudden and striking; but the road doubling, in order to turn more gently down the hill, presents from an elbow the finest view of a town I have ever seen; the whole city, with all its churches and convents, and its cathedral proudly rising in the midst, fills the vale. The river presents one reach, crossed by the bridge, and then dividing into two fine channels, forms a large island covered with wood; the rest of the vale full of verdure and cultivation, of gardens and habitations, finish the scene, in perfect unison with the great city that forms the capital feature. Wait on Mons. d'Ambournay, secretary of the Society of Agriculture, who was

* I once knew it at the Duc de Liancourt's.

absent when I was here before; we had an interesting conversation on agriculture, and on the means of encouraging it. I found from this very ingenious gentleman, that his plan of using madder green, which many years ago made so much noise in the agricultural world, is not practised at present any where; but he continues to think it perfectly practicable. In the evening to the play, where Madame Cretal, from Paris, acted *Nina*; and it proved the richest treat I have received from the French theatre. She performed it with an inimitable expression, with a tenderness, a *naïveté*, and an elegance withal, that mastered every feeling of the heart, against which the piece was written: her expression is as delicious, as her countenance is beautiful; in her acting, nothing overcharged, but all kept within the simplicity of nature. The house was crowded, garlands of flowers and laurel were thrown on the stage, and she was crowned by the other actors, but modestly removed them from her head, as often as they were placed there.—20 miles.

The 14th. Take the road to Dieppe. Meadows in the vale well watered, and hay now making. Sleep at Tote.—17½ miles.

The 15th. To Dieppe. I was lucky enough to find the passage-boat ready to sail; go on board with my faithful sure-footed blind friend. I shall probably never ride her again, but all my feelings prevent my selling her in France.—Without eyes she has carried me in safety above 1500 miles; and for the rest of her life she shall have no other master than myself; could I afford it, this should be her last labour: some ploughing, however, on my farm, she will perform for me, I dare say, cheerfully.

Landing at the neat, new-built town of Brighthelmstone, offers a much greater contrast to Dieppe, which is old and dirty, than Dover does to Calais; and in the castle inn I seemed for a while to be in fairy land; but I paid for the enchantment. The next day to Lord Sheffield's, a house I never go to, but to receive equal pleasure and instruction. I longed to make one for a short time in the evening library circle, but I took it strangely into my head, from one or two expressions, merely accidental, in the conversation, coming after my want of letters to France, that I had certainly lost a child in my absence; and I hurried to London next morning, where I had the pleasure of finding my alarm a false one; letters enough had been written, but all failed. To Bradfield.—202 miles.

1789.

IN my two preceding journies, the whole western half of France had been crossed in various directions; and the information I had received, in making them, had made me as much a master of the general husbandry, the soil, management and productions, as could be expected, without penetrating in every corner, and residing long in various stations; a method of surveying such a kingdom as France, that would demand several lives instead of years. The eastern part of the kingdom remained unexamined. The great mass of country, formed by the triangle, whose three points are Paris, Strasbourg and Moulins, and the mountainous region S. E. of the last town, presented in the map an ample space, which it would be necessary to pass before I could have such an idea of the kingdom as I wished to acquire; I determined to make this third effort, in order to accomplish a design which appeared more and more important, the more I reflected on it; and less likely to be executed by those whose powers are better adapted to the undertaking than mine. The meeting of the States General of France also, who were now assembled, made it the more necessary to lose no time; for, in all human probability, that assembly will be the epoch of a new constitution, which will have new effects, and, for what I know, attended with a new agriculture; and to have the regal sun in such a kingdom, both rise and set without the territory being known, must of necessity be regretted by every man solicitous for real political knowledge. The events of a century and half, including the brilliant reign of Louis XIV. will for ever render the sources of the French power interesting to mankind, and particularly that its state may be known previously to the establishment of an improved government, as the comparison of the effects of the old and new system will be not a little curious in future.

JUNE 2. To London. At night, *La Generosità d' Alessandro*, by Tarchi, in which Signor Marchesi exerted his powers, and sung a duet, that made me for some moments forget all the sheep and pigs of Bradfield. I was, however, much better entertained after it, by supping at my friend Dr. Burney's, and meeting Miss Burney; how seldom is it that we can meet two characters at once in whom great celebrity deducts nothing from private amiableness? How many dazzling ones that we have no desire to live with! give me such as to great talents add the qualities that make us wish to *shut up doors* with them.

The 3d. Nothing buzzing in my ears but the fête given last night by the Spanish ambassador. The best fête of the present period is that which ten millions of people are giving to themselves,

The feast of reason and the flow of soul.

The animated feelings of bosoms beating with gratitude for the escape of one common calamity, and the thrilling hope of the continuance of common blessings. Meet at Mr. Songa's the Count de Berchtold, who has much good sense and many important views:—Why does not the Emperor call him to his own country, and make him a minister? The world will never be well governed till princes know their subjects.

The 4th. To Dover in the machine, with two merchants from Stockholm, a German and a Swede; we shall be companions to Paris. I am more likely to learn something useful from the conversation of a Swede and a German, than from the chance medley Englishmen of a stage-coach.—72 miles.

The 5th. Passage to Calais; 14 hours for reflection in a vehicle that does not allow one power to reflect.—21 miles.

The 6th. A Frenchman and his wife, and a French teacher from Ireland, full of foppery and affectation, which her own nation did not give her, were our company, with a young good-natured raw countryman of hers, at whom she played off many airs and graces. The man and his wife contrived to produce a pack of cards, to banish, they said, *l'enuye* of the journey; but they contrived also to fleece the young fellow of five louis. This is the first French diligence I have been in, and shall be the last; they are detestable. Sleep at Abbeville.—78 miles.

These men and women, girls and boys, think themselves (except the Swede) very chearful because very noisy; they have stunned me with singing; my ears have been so tormented with French airs, that I would almost as soon have rode the journey blindfold on an ass. This is what the French call good spirits; no truly chearful emotion in their bosoms; silent or singing; but for conversation they had none. I lose all patience in such company. Heaven send me a blind mare rather than another diligence! We were all this night, as well as all the day, on the road, and reached Paris at nine in the morning.—102 miles.

The 8th. To my friend Lazowski, to know where were the lodgings I had written him to hire me, but my good Duchesse d'Estissac would not allow him to execute my commission. I found an apartment in her hotel prepared for me. Paris is at present in such a ferment about the States General, now holding at Versailles, that conversation is absolutely absorbed by them. Not a word of any thing else talked of. Every thing is considered, and justly so, as important in such a crisis of the fate of four-and-twenty millions of people. It is now a serious contention whether the representatives are to be called the *Commons* or the *Tiers Etat*; they call themselves steadily the former, while the court and the great lords reject the term with a species of apprehension, as if it involved a meaning not easily to be fathomed. But this point is of little consequence compared with another, that has kept the states for some time in inactivity, the verification

fication of their power separately or in common. The nobility and the clergy demand the former, but the Commons steadily refuse it; the reason why a circumstance, apparently of no great consequence, is thus tenaciously regarded, is, that it may decide their sitting for the future in separate houses or in one. Those who are warm for the interest of the people declare that it will be impossible to reform some of the grossest abuses in the state, if the nobility, by sitting in a separate chamber, shall have a negative on the wishes of the people: and that to give such a *veto* to the clergy would be still more preposterous; if therefore, by the verification of their powers in one chamber, they shall once come together, the popular party hope that there will remain no power afterwards to separate. The nobility and clergy foresee the same result, and will not therefore agree to it. In this dilemma it is curious to remark the *feelings* of the moment. It is not my business to write memoirs of what passes, but I am intent to catch, as well as I can, the opinions of the day most prevalent. While I remain at Paris, I shall see people of all descriptions, from the coffee-house politicians to the leaders in the states; and the chief object of such rapid notes as I throw on paper, will be to catch the ideas of the moment; to compare them afterwards with the actual events that shall happen, will afford amusement at least. The most prominent feature that appears at present is, that an idea of common interest and common danger does not seem to unite those, who, if not united, may find themselves too weak to oppose the danger that must arise from the people being sensible of a strength the result of *their* weakness. The king, court, nobility, clergy, army, and parliament, are nearly in the same situation. All these consider, with equal dread, the ideas of liberty, now afloat; except the first, who, for reasons obvious to those who know his character, troubles himself little, even with circumstances that concern his power the most intimately. Among the rest, the feeling of danger is common, and they would unite, were there a head to render it easy, in order to do without the states at all. That the commons themselves look for some such hostile union as more than probable, appears from an idea which gains ground, that they will find it necessary, should the other two orders continue to unite with them in one chamber, to declare themselves boldly the representatives of the kingdom at large, calling on the nobility and clergy to take their places—and to enter upon deliberations of business without them, should they refuse it. All conversation at present is on this topic, but opinions are more divided than I should have expected. There seem to be many who hate the clergy so cordially, that rather than permit them to form a distinct chamber, they would venture on a new system, dangerous as it might prove.

The 9th. The business going forward at present in the pamphlet shops of Paris is incredible. I went to the Palais Royal to see what new things were published, and to procure a catalogue of all. Every hour produces something new.

Thirteen

Thirteen came out to-day, sixteen yesterday, and ninety-two last week. We think sometimes that Debrett's or Stockdale's shops at London are crowded, but they are mere deserts, compared to Desein's, and some others here, in which one can scarcely squeeze from the door to the counter. The price of printing two years ago was from 27 liv. to 30 liv. per sheet, but now it is from 60 liv. to 80 liv. This spirit of reading political tracts, they say, spreads into the provinces, so that all the presses of France are equally employed. Nineteen-twentieths of these productions are in favour of liberty, and commonly violent against the clergy and nobility; I have to-day bespoken many of this description, that have reputation; but enquiring for such as had appeared on the other side of the question, to my astonishment I find there are but two or three that have merit enough to be known. Is it not wonderful, that while the press teems with the most levelling and even seditious principles, which put in execution would overturn the monarchy, nothing in reply appears, and not the least step is taken by the court to restrain this extreme licentiousness of publication? It is easy to conceive the spirit that must thus be raised among the people. But the coffee-houses in the Palais Royal present yet more singular and astonishing spectacles; they are not only crowded within, but other expectant crowds are at the doors and windows, listening *a gorge déployée* to certain orators, who from chairs or tables harangue each his little audience: the eagerness with which they are heard, and the thunder of applause they receive for every sentiment of more than common hardness or violence against the present government, cannot easily be imagined. I am all amazement at the ministry permitting such nests and hotbeds of sedition and revolt, which disseminate amongst the people, every hour, principles that by and by must be opposed with vigour, and therefore it seems little short of madness to allow the propagation at present.

The 10th. Every thing conspires to render the present period in France critical: the want of bread is terrible: accounts arrive every moment from the provinces of riots and disturbances, and calling in the military, to preserve the peace of the markets. The prices reported are the same as I found at Abbeville and Amiens 5*s.* (2½*d.*) a pound for white bread, and 3½*s.* to 4*s.* for the common sort, eaten by the poor: these rates are beyond their faculties, and occasion great misery. At Meudon, the police, that is to say the intendant, ordered that no wheat should be sold in the market without the person taking at the same time an equal quantity of barley. What a stupid and ridiculous regulation, to lay obstacles on the supply, in order to be better supplied; and to shew the people the fears and apprehensions of government, creating thereby an alarm, and raising the price at the very moment they wish to sink it! I have had some conversation on this topic with well informed persons, who have assured me, that the price is, as usual, much higher than the proportion

proportion of the crop demanded, and there would have been no real scarcity if Mr. Necker would have let the corn-trade alone; but his edicts of restriction, which have been mere comments on his book on the legislation of corn, have operated more to raise the price than all other causes together. It appears plain to me, that the violent friends of the commons are not displeased at the high price of corn, which second their views greatly, and makes any appeal to the common feeling of the people more easy, and much more to their purpose than if the price were low. Three days past, the chamber of the clergy contrived a cunning proposition; it was to send a deputation to the commons, proposing to name a commission from the three orders to take into consideration the misery of the people, and to deliberate on the means of lowering the price of bread. This would have led to the deliberation by order, and not by heads, consequently must be rejected, but unpopularly so from the situation of the people: the commons were equally dextrous; in their reply, they prayed and conjured the clergy to join them in the common hall of the states to deliberate, which was no sooner reported at Paris than the clergy became doubly an object of hatred; and it became a question with the politicians of the *Caffé de Foy*, whether it were not lawful for the commons to decree the application of the estates of the clergy towards easing the distress of the people.

The 11th. I have been in much company all day, and cannot but remark, that there seem to be no settled ideas of the best means of forming a new constitution. Yesterday the Abbé Syeyes made a motion in the house of commons, to declare boldly to the privileged orders, that if they will not join the commons, the latter will proceed in the national business without them; and the house decreed it, with a small amendment. This causes much conversation on what will be the consequence of such a proceeding; and, on the contrary, on what may flow from the nobility and clergy continuing steadily to refuse to join the commons, and should they so proceed, to protest against all they decree, and appeal to the king to dissolve the states, and recal them in such a form as may be practicable for business. In these most interesting discussions, I find a general ignorance of the principles of government; a strange and unaccountable appeal, on one side, to ideal and visionary rights of nature; and, on the other, no settled plan that shall give security to the people for being in future in a much better situation than hitherto; a security absolutely necessary. But the nobility, with the principles of great lords that I converse with, are most disgustingly tenacious of all old rights, however hard they may bear on the people; they will not hear of giving way in the least to the spirit of liberty beyond the point of paying equal land-taxes, which they hold to be all that can with reason be demanded. The popular party, on the other hand, seem to consider all liberty as depending on the privileged classes being lost, and outvoted in the order of the commons,

commons, at least for making the new constitution; and when I urge the great probability, that should they once unite, there will remain no power of ever separating them; and that in such case, they will have a very questionable constitution, perhaps a very bad one; I am always told, that the first object must be for the people to get the power of doing good; and that it is no argument against such a conduct to urge that an ill use may be made of it. But among such men, the common idea is, that any thing tending towards a separate order, like our house of lords, is absolutely inconsistent with liberty; all which seems perfectly wild and unfounded.

The 12th. To the royal society of agriculture, which meets at the *hotel de ville*, and of which being an *associé*, I voted, and received a *jetton*, which is a small medal given to the members, every time they attend, in order to induce them to mind the business of their institution; it is the same at all royal academies, &c. and amounts, in a year, to a considerable and ill-judged expence; for what good is to be expected from men who would go merely to receive their *jetton*? Whatever the motive may be, it seems well attended: near thirty were present; among them Parmentier, vice-president, Cadet de Vaux, Fourcroy, Tillet, Desmarets, Brouffonet, secretary, and Creté de Palieul, at whose farm I was two years ago, and who is the only practical farmer in the society. The secretary reads the titles of the papers presented, and gives some little account of them; but they are not read unless particularly interesting; then memoirs are read by the members, or reports of references; and when they discuss or debate, there is no order, but all speak together as in a warm private conversation. The Abbé Raynal has given them 1200 liv. (52l. 10s.) for a premium on some important subject; and my opinion was asked what it should be given for. Give it, I replied, in some way for the introduction of turnips. But that they conceive to be an object of impossible attainment; they have done so much, and the government so much more, and all in vain, that they consider it as a hopeless object. I did not tell them that all hitherto done has been absolute folly; and that the right way to begin, was to undo every thing done. I am never present at any societies of agriculture, either in France or England, but I am much in doubt with myself whether, when best conducted, they do most good or mischief; that is, whether the benefits a national agriculture may by great chance owe to them, are not more than counterbalanced by the harm they effect, by turning the public attention to frivolous objects, instead of important ones, or dressing important ones in such a garb as to make them trifles? The only society that could be really useful would be that which, in the culture of a large farm, should exhibit a perfect example of good husbandry, for the use of such as would resort to it; consequently one that should consist solely of practical men; and then query whether many good cooks would not spoil a good dish.

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The ideas of the public on the great business going on at Versailles change daily and even hourly. It now seems the opinion, that the commons, in their late violent vote, have gone too far; and that the union of the nobility, clergy, army, parliament, and King, will be by far too powerful for them; such an union is said to be in agitation; and that the Count d'Artois, the Queen, and the party usually known by her name, are taking steps to effect it, against the moment when the proceedings of the commons shall make it necessary to act with unity and vigour. The abolition of the parliaments is a topic of common conversation among the popular leaders, as a step essentially necessary; because, while they exist, they are tribunals to which the court can have resort, should they be inclined to take any step against the existence of the states: those bodies are alarmed, and see with deep regret, that their refusal to register the royal edicts has created a power in the nation not only hostile, but dangerous to their existence. It is now very well known and understood on all hands, that should the King get rid of the states, and govern on any tolerable principles, his edicts would be enregistered by all the parliaments. In the dilemma and apprehension of the moment, the people look very much to the Duc d'Orleans, as to a head; but with palpable and general ideas of distrust and want of confidence; they regret his character, and lament that they cannot depend on him in any severe and difficult trial: they conceive him to be without steadiness, and that his greatest apprehension is to be exiled from the pleasures of Paris, and tell of many littlenesses he practised before, to be recalled from banishment. They are, however, so totally without a head, that they are contented to look to him as one; and are highly pleased with what is every moment reported, that he is determined to go at the head of a party of the nobility, and verify their powers in common with the commons. All agree, that had he firmness, in addition to his vast revenue of seven millions a year (306,250*l.*) and four more (175,000*l.*) in reversion, after the death of his father-in-law, the Duc de Pen-
thievre, he might, at the head of the popular cause, do any thing.

The 13th. In the morning to the King's library, which I had not seen when before at Paris; it is a vast apartment, and, as all the world knows, nobly filled. Every thing is provided to accommodate those who wish to read or transcribe—of whom there were sixty or seventy present. Along the middle of the rooms are glass cases, containing models of the instruments of many trades preserved for the benefit of posterity, being made on the most exact scale of proportion; among others the potter's, founder's, brickmaker's, chymist's, &c. &c. and lately added a very large one of the English garden, most miserably imagined; but with all this not a plough, or an iota of agriculture; yet a farm might be much easier represented than the garden they have attempted, and with infinitely more use. I have no doubt but there may arise many cases, in which the pre-

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servation

servation of instruments, unaltered, may be of considerable utility; I think I see clearly, that such a use would result in agriculture, and, if so, why not in other arts? These cases of models, however, have so much the air of children's play-houses, that I would not answer for my little girl, if I had her here, not crying for them. At the Duchefs d'Anville's, where meet the Archbishop of Aix, Bishop of Blois, Prince de Laon, and Duc and Duchefs de la Rochefoucauld, the three last of my old Bagnere de Luchon acquaintance, Lord and Lady Camelford, Lord Eyre, &c. &c.

All this day I hear nothing but anxiety of expectation for what the crisis in the states will produce. The embarrassment of the moment is extreme. Every one agrees that there is no ministry: the Queen is closely connecting herself with the party of the princes, with the Count d'Artois at their head; who are all so adverse to Mons. Necker, that every thing is in confusion: but the King, who is personally the honestest man in the world, has but one wish, which is to do right; yet, being without those decisive parts that enable a man to foresee difficulties and to avoid them, finds himself in a moment of such extreme perplexity, that he knows not what council to take refuge in: it is said that Mons. Necker is alarmed for his power, and anecdote reports things to his disadvantage, which probably are not true:—of his trimming—and attempting to connect himself with the Abbé de Vermont, reader to the Queen, who has great influence in all affairs in which he chuses to interfere; this is hardly credible, as that party are known to be exceedingly adverse to Mons. Necker; and it is even said, that, as the Count d'Artois, Madame de Polignac, and a few others were, but two days ago, walking in the private garden of Versailles, they met Madame Necker, and descended even to hissing her: if half this be true, it is plain enough that this minister must speedily retire. All who adhere to the antient constitution, or rather government, consider him as their mortal enemy; they assert, and truly, that he came in under circumstances that would have enabled him to do every thing he pleased—he had King and kingdom at command—but that the errors he was guilty of, for want of some settled plan, have been the cause of all the dilemmas experienced since. They accuse him heavily of assembling the notables, as a false step that did nothing but mischief: and assert that his letting the King go to the states-general, before their powers were verified, and the necessary steps taken to keep the orders separate, after giving double the representation to the *tiers* to that of the other two orders, was madness; and that he ought to have appointed commissaries to have received the verification before admittance. They accuse him further of having done all this through an excessive and insufferable vanity, which gave him the idea of guiding the deliberation of the states by his knowledge and reputation. It is expressly asserted, however, by M. Necker's most intimate friends, that he

he has acted with good faith, and that he has been in principle a friend to the regal power, as well as to an amelioration of the condition of the people. The worst thing I know of him is his speech to the states on their assembling,—a great opportunity, but lost,—no leading or masterly views,—no decision on circumstances in which the people ought to be relieved, and new principles of government adopted;—it is the speech you would expect from a banker's clerk of some ability. Concerning it there is an anecdote worth inserting; he knew his voice would not enable him to go through the whole of it, in so large a room, and to so numerous an assembly; and therefore he had spoken to Monsf. de Brouffonet, of the Academy of Sciences, and secretary to the Royal Society of Agriculture, to be in readiness to read it for him. He had been present at an annual general meeting of that society, when Monsf. de Brouffonet had read a discourse with a powerful piercing voice, that was heard distinctly to the greatest distance. This gentleman attended him several times to take his instructions, and to be sure of understanding the interlineations that were made, even after the speech was finished. M. de Brouffonet was with him the evening before the assembly of the states, at nine o'clock: and next day, when he came to read it in public, he found still more corrections and alterations, which Monsf. Necker had made after quitting him; they were chiefly in style, and shewed how very solicitous he was in regard to the form and decoration of his matter: the ideas in my opinion wanted this attention more than the style. Monsf. de Brouffonet himself told me this little anecdote. This morning in the states three cureés of Poitou have joined themselves to the commons, for the verification of their powers, and were received with a kind of madness of applause; and this evening at Paris nothing else is talked of. The nobles have been all day in debate, without coming to any conclusion, and have adjourned to Monday.

The 14th. To the King's garden, where Monsf. Thouin had the goodness to shew me some small experiments he has made on plants that promise greatly for the farmer, particularly the *lathyrus biennis**, and the *melilotus syberica**, which now make an immense figure for forage; both are biennial; but will last three or four years if not seeded; the *Achillea syberica* and an *astragalus* appear good; he has promised me seeds. The Chinese hemp has perfected its seeds, which it had not done before in France. The more I see of Monsf. Thouin the better I like him; he is one of the most amiable men I know.

To the repository of the royal machines, which Monsf. Vandermond shewed and explained to me, with great readiness and politeness. What struck me most was Monsf. Vaucussion's machine for making a chain, which I was told Mr. Watt of

* I have since cultivated these plants in small quantities, and believe them to be a very important object.

Birmingham admired very much, at which my attendants seemed not displeased. Another for making the cogs indented in iron wheels. There is a chaff cutter, from an English original; and a model of the nonsensical plough to go without horses; these are the only ones in agriculture. Many of very ingenious contrivance for winding silk, &c. In the evening to the theatre *François*, the Siege of Calais, by Monf. de Belloy, not a good, but a popular performance.

It is now decided by the popular leaders, that they will move to-morrow to declare all taxes illegal not raised by authority of the states general, and to grant them for a term only, either for two years, or for the duration of the present session of the states. This plan is highly approved at Paris by all friends of liberty; and it is certainly a rational mode of proceeding, founded on just principles, and will involve the court in a great dilemma.

The 15th. This has been a rich day, and such an one as ten years ago none could believe would ever arrive in France; a very important debate being expected on what, in our house of commons, would be termed the state of the nation, my friend Monf. Lazowski and myself were at Versailles by eight in the morning. We went immediately to the hall of the states to secure good seats in the gallery; we found some deputies already there, and a pretty numerous audience collected. The room is too large; none but Stentorian lungs, or the finest clearest voices can be heard; however the very size of the apartment, which admits 2000 people, gave a dignity to the scene. It was indeed an interesting one. The spectacle of the representatives of twenty-five millions of people, just emerging from the evils of 200 years of arbitrary power, and rising to the blessings of a freer constitution, assembled with open doors under the eye of the public, was framed to call into animated feelings every latent spark, every emotion of a liberal bosom. To banish whatever ideas might intrude of their being a people too often hostile to my own country,—and to dwell with pleasure on the glorious idea of happiness to a great nation—of felicity to millions yet unborn. Monf. l'Abbé Syeyes opened the debate. He is one of the most zealous sticklers for the popular cause; carries his ideas not to a regulation of the present government, which he thinks too bad to be regulated at all, but wishes to see it absolutely overturned, being in fact a violent republican: this is the character he commonly bears, and in his pamphlets he seems pretty much to justify such an idea. He speaks ungracefully, and uneloquently, but logically, or rather reads so, for he read his speech, which was prepared. His motion was to declare the assembly the representatives known and verified of the French nation, admitting the right of all absent deputies (the nobility and clergy) to be received among them on the verification of their powers. Monf. de Mirabeau spoke without notes, for near an hour, with a
warmth,

warmth, animation, and eloquence, that entitles him to the reputation of an undoubted orator. He opposed the words *known* and *verified*, in the proposition of Abbé Syeyes, with great force of reasoning; and proposed, in lieu, that they should declare themselves simply *Representatives du peuple François*: that no *veto* should exist against their resolves in any other assembly: that all taxes are illegal, but should be granted during the present session of the states, and no longer: that the debt of the king should become the debt of the nation, and be secured on funds accordingly. Monf. de Mirabeau was well heard, and his proposition much applauded. Monf. de Mounier, a deputy from Dauphine, of great reputation, and who has published some pamphlets, very well approved by the public, moved a different resolution, to declare themselves the legitimate representatives of the majority of the nation: that they should vote by head and not by order: and that they should never acknowledge any right in the representatives of the clergy or nobility to deliberate separately. Monf. Rabaud St. Etienne, a protestant from Languedoc, also an author, who has written on the present affairs, and a man of considerable talents, made likewise his proposition, which was to declare themselves the representatives of the people of France; to declare all taxes null; to regrant them during the sitting of the states; to verify and consolidate the debt; and to vote a loan. All which were well approved except the loan, which was not at all to the feeling of the assembly. This gentleman speaks clearly and with precision, and only passages of his speech from notes. Monf. Bernarve, a very young man, from Grenoble, spoke without notes with great warmth and animation. Some of his periods were so well rounded, and so eloquently delivered, that he met with much applause, several members crying—*bravo!*

In regard to their general method of proceeding, there are two circumstances in which they are very deficient: the spectators in the galleries are allowed to interfere in the debates by clapping their hands, and by other noisy expressions of approbation: this is grossly indecent; it is also dangerous; for, if they be permitted to express approbation, they are, by parity of reason, allowed expressions of dissent; and they may hiss as well as clap; which, it is said, they have sometimes done:—this would be, to over-rule the debate, and influence the deliberations. Another circumstance, is the want of order among themselves; more than once to-day there were an hundred members on their legs at a time, and Monf. Baillie absolutely without power to keep order. This arises very much from complex motions being admitted; to move a declaration relative to their title, to their powers, to taxes, to a loan, &c. &c. all in one proposition, appears to English ears preposterous, and certainly is so. Specific motions, founded on single and simple propositions, can alone produce order in debate; for it is endless to have five hundred members declaring their
reasons.

reasons of assent to one part of a complex proposition, and their dissent to another part. A debating assembly should not proceed to any business whatever till they have settled the rules and orders of their proceedings, which can only be done by taking those of other experienced assemblies, confirming them as they find useful, and altering such as require to be adapted to different circumstances. The rules and orders of debate in the house of commons of England, as I afterwards took the liberty of mentioning to Monsf. Rabaud St. Etienne, might have been taken at once from Mr. Hatsel's book, and would have saved them at least a fourth of their time. They adjourned for dinner. Dined ourselves with the Duc de Liancourt, at his apartments in the palace, meeting twenty deputies.—I sat by M. Rabaud St. Etienne, and had much conversation with him; they all speak with equal confidence on the fall of despotism. They foresee, that attempts very adverse to the spirit of liberty will be made, but the spirit of the people is too much excited at present to be crushed any more. Finding that the question of to-day's debate cannot be decided to-day, and that in all probability it will be unfinished even to-morrow, as the number that will speak on it is very great, return in the evening to Paris.

The 16th. To Dugny, ten miles from Paris, again with Monsf. de Broussonet, to wait on Monsf. Creté de Palieul, the only practical farmer in the Society of Agriculture. M. Broussonet, than whom no man can be more eager for the honour and improvement of agriculture, was desirous that I should witness the practice and improvements of a gentleman who stands so high in the list of good French farmers. Called first on the brother of Monsf. Creté who at present has the *posse*, and consequently 140 horses; walked over his farm, and the crops he shewed me of wheat and oats were on the whole very fine, and some of them superior; but I must confess I should have been better pleased with them if he had not had his stables so well filled with a view different from that of the farm. And to look for a course of crops in France is vain; he sows white corn twice, thrice, and even four times in succession. At dinner, &c. had much conversation with the two brothers, and with some other neighbouring cultivators present, on this point, in which I recommended either turnips or cabbages, according to the soil, for breaking their rotations of white corn. But every one of them, except Monsf. de Broussonet, was against me; they demanded, *Can we sow wheat after turnips and cabbages?* On a small portion you may and with great success; but the time of consuming the greater part of the crop renders it impossible. *That is sufficient, if we cannot sow wheat after them, they cannot be good in France.* This idea is every where nearly the same in that kingdom. I then said, that they might have half their land under wheat, and yet be good farmers; thus—1. Beans;—2. Wheat;—3. Tares;—4. Wheat;—5. Clover;—6. Wheat;—this they approved better of, but thought their

their own courses more profitable. But the most interesting circumstance of their farms is the chicory (*chicorium intybus*). I had the satisfaction to find, that Monf. Creté de Palieul had as great an opinion of it as ever; that his brother had adopted it; that it was very flourishing on both their farms, and on those of their neighbours also: I never see this plant but I congratulate myself on having travelled for something more than to write in my closet; and that the introduction of it in England would alone, if no other result had flowed from one man's existence, have been enough to shew that he did not live in vain. Of this excellent plant, and Monf. Creté's experiments on it, more elsewhere.

The 17th. Conversation turns on the motion of l'Abbé Syeyes being accepted, though that of the Count de Mirabeau better relished. But his character is a dead weight upon him; there is a suspicion that he has received 100,000 liv. from the Queen; a blind, improbable report; for his conduct would in every probability be very different had any such transaction taken place: but when a man's life has not passed free from gross errors, to use the mildest language, suspicions are ever ready to fix on him, even when he is as free from what ought at the moment to give the imputation, as the most immaculate of their patriots. This report brings out others from their lurking holes; that he published, at her instigation, the anecdotes of the court of Berlin; and that the King of Prussia, knowing the causes of that publication, circulated the memoirs of Madame de la Motte all over Germany. Such are the eternal tales, suspicions, and improbabilities for which Paris has always been so famous. One clearly, however, gathers from the complexion of conversation, even on the most ridiculous topics, provided of a public nature, how far, and for what reason, confidence is lodged in certain men. In every company, of every rank, you hear of the Count de Mirabeau's talents; that he is one of the first pens of France, and the first orator; and yet that he could not carry from confidence six votes on any question in the states. His writings, however, spread in Paris and the provinces: he published a journal of the states, written for a few days with such force, and such severity, that it was silenced by an express edict of government. This is attributed to Monf. Necker, who was treated in it with so little ceremony, that his vanity was wounded to the quick. The number of subscribers to the journal was such, that I have heard the profit to Monf. Mirabeau calculated at 80,000 liv. (3500l.) a year. Since its suppression, he publishes once or twice a week a small pamphlet, to answer the same purpose of giving an account of the debates, or rather observations on them, entitled, 1, 2, 3, &c. *Lettre de Comte de Mirabeau à ses Commentateurs*, which, though violent, sarcastic, and severe, the court has not thought proper to stop, respecting, I suppose, its title. It is a weak and miserable conduct,

duct, to single out any particular publication for prohibition, while the press groans with innumerable productions, whose tendency is absolutely to overturn the present government; to permit such pamphlets to be circulated all over the kingdom, even by the posts and diligences in the hands of government, is a blindness and folly, from which there are no effects that may not be expected. In the evening to the comic opera; Italian music, Italian words, and Italian performers; and the applause so incessant and rapturous, that the ears of the French must be changing apace. What would Jean Jacques have said, could he have been a witness to such a spectacle at Paris!

The 18th. Yesterday the commons decreed themselves, in consequence of the Abbé Syeyes's intended motion, the title of *Assemblée Nationale*; and also, considering themselves then in activity, the illegality of all taxes; but granted them during the session, declaring that they would, without delay, deliberate on the consolidating of the debt; and on the relief of the misery of the people. These steps give great spirits to the violent partizans of a new constitution, but amongst more sober minds, I see evidently an apprehension, that it will prove a precipitate measure. It is a violent step, which may be taken hold of by the court, and converted very much to the people's disadvantage. The reasoning of Mons. de Mirabeau against it was forcible and just—*Si je voulois employer contre les autres motions les armes dont on se sert pour attaquer la mienne, ne pourrois-je pas dire a mon tour: de quelque maniere que vous-vous qualifiez, que vous soyez les représentans connus & verifiés de la nation, les représentans de 25 millions d'hommes, les représentans de la majorité du peuple, dussiez-vous même vous appeller l'Assemblée Nationale, les états généraux, empêcherez-vous les classes privilégiées de continuer des assemblées que sa majesté a reconnues? Les empêcherez-vous de prendre des deliberations? Les empêcherez-vous de pretendre au veto? Empêcherez-vous le Roi de les recevoir? De les reconnoitre, de leur continuer les mêmes titres qu'il leur a donnés jusqu'à présent? Enfin, empêcherez-vous la nation d'appeller le clergé, le clergé, la noblesse, la noblesse?*

To the Royal Society of Agriculture, where I gave my vote with the rest, who were unanimous for electing General Washington an honorary member; this was a proposal of Mons. de Brouffonet, in consequence of my having assured him, that the general was an excellent farmer, and had corresponded with me on the subject. Abbé Commerel was present; he gave a pamphlet on a new project, the *choux a fauché*, and a paper of the seed.

The 19th. Accompanied Mons. de Brouffonet to dine with Mons. de Parmentier, at the *hotel des invalids*. A president of the parliament, a Mons. Mailly, brother-in-law to the chancellor, was there; Abbé Commerel, &c. &c. I remarked two years ago, that Mons. Parmentier is one of the best of men, and beyond all question understands every circumstance of the *boulangerie* better than any

any other writer, as his productions clearly manifest. After dinner, to the plains of Sablon, to see the society's potatoes and preparation for turnips, of which I shall only say that I wish my brethren to stick to their *scientific* farming, and leave the practical to those who understand it. What a sad thing for philosophical husbandmen that God Almighty created such a thing as couch (*triticum repens.*)

The 20th. News!—News!—Every one stares at what every one might have expected. A message from the King to the presidents of the three orders, that he should meet them on Monday; and, under pretence of preparing the hall for the *seance royale*, the French guards were placed with bayonets to prevent any of the deputies entering the room. The circumstances of doing this ill-judged act of violence have been as ill-advised as the act itself. Monf. Bailly received no other notice of it than by a letter from the Marquis de Brézé, and the deputies met at the door of the hall, without knowing that it was shut. Thus the seeds of disgust were sown wantonly in the manner of doing a thing, which in itself was equally impalatable and unconstitutional. The resolution taken on the spot was a noble and firm one; it was to assemble instantly at the *Jeu de paume*, and there the whole assembly took a solemn oath never to be dissolved but by their own consent, and to consider themselves, and act as the National Assembly, let them be wherever violence or fortune might drive them; and their expectations were so little favourable, that expresses were sent off to Nantes, intimating that the National Assembly might possibly find it necessary to take refuge in some distant city. This message, and placing guards at the hall of the states, are the result of long and repeated councils, held in the King's presence at Marly, where he has been shut up for some days, seeing nobody; and no person admitted, even to the officers of the court, without jealousy and circumspection. The King's brothers have no seat in the council, but the Count d'Artois incessantly attends the resolutions, conveys them to the Queen, and has long conferences with her. When this news arrived at Paris, the Palais Royal was in a flame, the coffee-houses, pamphlet-shops, corridors, and gardens were crowded,—alarm and apprehension sat in every eye,—the reports that were circulated eagerly, tending to shew the violent intentions of the court, as if it were bent on the utter extirpation of the French nation, except the party of the Queen, are perfectly incredible for their gross absurdity: yet nothing was so glaringly ridiculous, but the mob swallowed it with indiscriminating faith. It was, however, curious to remark, among people of another description (for I was in several parties after the news arrived), that the balance of opinions was clearly that the National Assembly, as it called itself, had gone too far—had been too precipitate—and too violent—had taken steps that the mass of the people would not support. From which we may conclude, that if the court, having

seen the tendency of their late proceedings, shall pursue a firm and politic plan, the popular cause will have little to boast.

The 21st. It is impossible to have any other employment at so critical a moment, than going from house to house demanding news; and remarking the opinions and ideas most current. The present moment is, of all others, perhaps that which is most pregnant with the future destiny of France. The step the commons have taken of declaring themselves the National Assembly, independent of the other orders, and of the King himself, precluding a dissolution, is in fact an assumption of all the authority in the kingdom. They have at one stroke converted themselves into the long parliament of Charles I. It needs not the assistance of much penetration to see that if such a pretension and declaration be not done away, King, Lords, and Clergy are deprived of their shares in the legislature of France. So bold, and apparently desperate a step, equally destructive to the royal authority, the parliaments, and the army, and to every interest in the realm, can never be allowed. If it be not opposed, all other powers will lie in ruins around that of the commons. With what anxious expectation must one therefore wait to see if the crown will exert itself firmly on the occasion, with such an attention to an improved system of liberty, as is absolutely necessary to the moment! All things considered, that is, the characters of those who are in possession of power, no well digested system and steady execution are to be looked for. In the evening to the play; Madame Rocquere performed the Queen in Hamlet; it may easily be supposed how that play of Shakespeare is cut in pieces. It has however effect by her admirable acting.

The 22d. To Versailles at six in the morning, to be ready for the *seance royale*. Breakfasting with the Duc de Liancourt, we found that the King had put off going to the states till to-morrow morning. A committee of council was held last night, which sat till midnight, at which were present Monsieur and the Count d'Artois for the first time: an event considered as extraordinary, and attributed to the influence of the Queen. The Count d'Artois, the determined enemy of Mons. Necker's plans, opposed his system, and prevailed to have the *seance* put off to give time for a council in the King's presence to-day. From the chateau we went to find out the deputies; reports were various where they were assembling. To the *Récolets*, where they had been, but finding it incommodious, they went to the church of St. Louis, whither we followed them, and were in time to see M. Bailly take the chair, and read the King's letter, putting off the *seance* till to-morrow. The spectacle of this meeting was singular,—the crowd that attended in and around the church was great—and the anxiety and suspense in every eye, with the variety of expression that flowed from different views and different characters, gave to the countenances of all the world an impression I had never witnessed before. The only business
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of importance transacted, but which lasted till three o'clock, was receiving the oaths and the signatures of some deputies, who had not taken them at the *Jeu de paume*; and the union of three bishops and 150 of the deputies of the clergy, who came to verify their powers, and were received by such applause, with such clapping and shouting from all present, that the church resounded. Apparently the inhabitants of Versailles, which having a population of 60,000 people can afford a pretty numerous mob, are to the last person in the interest of the commons; remarkable, as this town is absolutely fed by the palace; and if the cause of the court be not popular here, it is easy to suppose what it must be in all the rest of the kingdom. Dine with the Duc de Liancourt, in the palace, a large party of nobility and deputies of the commons, the Duc d'Orleans amongst them; the Bishop of Rodez, Abbé Syeyes, and Monf. Rabaud St. Etienne. This was one of the most striking instances of the impression made on men of different ranks by great events. In the streets, and in the church of St. Louis, such anxiety was in every face, that the importance of the moment was written in the physiognomy; and all the common forms and salutations of habitual civility lost in attention: but amongst a class so much higher as those I dined with, I was struck with the difference. There were not, in thirty persons, five in whose countenances you could guess that any extraordinary event was going forward: more of the conversation was indifferent than I should have expected. Had it all been so, there would have been no room for wonder; but observations were made of the greatest freedom, and so received as to mark that there was not the least impropriety in making them. In such a case, would not one have expected more energy of feeling and expression, and more attention in conversation to the crisis that must in its nature fill every bosom? Yet they ate, and drank, and sat, and walked, loitered, and smirked and smiled, and chatted with that easy indifference, that made me stare at their insipidity. Perhaps there is a certain *nonchalance* that is natural to people of fashion from long habit, and which marks them from the vulgar, who have a thousand asperities in the expression of their feelings, that cannot be found on the polished surface of those whose manners are smoothed by society, not worn by attrition. Such an observation would therefore in all common cases be unjust; but I confess the present moment, which is beyond all question the most critical that France has seen from the foundation of the monarchy, since the council was assembled that must finally determine the King's conduct, was such as might have accounted for a behaviour totally different. The presence of the Duc d'Orleans might do a little, but not much; his manner might do more; for it was not without some disgust, that I observed him several times playing off that small sort of wit, and slipshod readiness to titter, which, I suppose, is a part of his character, or it would not have appeared to-day. From his manner, he seemed not at all dis-

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pleased.

pleased. The Abbé Syeyes has a remarkable physiognomy, a quick rolling eye; penetrating the ideas of other people, but so cautiously reserved as to guard his own. There is as much character in his air and manner as there is vacuity of it in the countenance of Monf. Rabaud St. Etienne, whose physiognomy, however, is far from doing him justice, for he has undoubted talents. It seems agreed, that if in the council the Count d'Artois carries his point, Monf. Necker, the Count de Montmorin, and Monf. de St. Priest will resign; in which case Monf. Necker's return to power, and in triumph, will inevitably happen. Such a turn, however, must depend on events.—Evening.—The plan of the Count d'Artois accepted; the King will declare it in his speech to-morrow. Monf. Necker demanded to resign, but was refused by the King. All is now anxiety to know what the plan is.

The 23d. The important day is over: in the morning Versailles seemed filled with troops: the streets, about ten o'clock, were lined with the French guards, and some Swiss regiments, &c.: the hall of the states was surrounded, and centinels fixed in all the passages, and at the doors; and none but deputies admitted. This military preparation was ill judged, for it seemed admitting the impropriety and unpopularity of the intended measure, and the expectation, perhaps fear, of popular commotions. They pronounced, before the King left the chateau, that his plan was adverse to the people, from the military parade with which it was ushered in. The contrary, however, proved to be the fact; the propositions are known to all the world: the plan was a good one; much was granted to the people in great and essential points; and as it was granted before they had provided for those public necessities of finance, which occasioned the states being called together; and consequently left them at full power in future to procure for the people all that opportunity might present, they apparently ought to accept them, provided some security be given for the future meetings of the states, without which all the rest would be insecure; but as a little negotiation may easily secure this, I apprehend the deputies will accept them conditionally: the use of soldiers, and some imprudencies in the manner of forcing the King's system, relative to the interior constitution, and assembling of the deputies, as well as the ill-blood which had had time to brood for three days past in their minds, prevented the commons from receiving the King with any expressions of applause; the clergy, and some of the nobility, cried *vive le Roi!* but treble the number of mouths being silent, took off all effect. It seems they had previously determined to submit not to violence: when the King was gone, and the clergy and nobility retired, the Marquis de Brézé waiting a moment to see if they meant to obey the King's express orders, to retire also to another chamber prepared for them, and perceiving that no one moved, addressed them,—*Messieurs, vous connoissez les intentions du Roi.* A dead silence ensued;

and

and then it was that superior talents bore the sway, that overpowers in critical moments all other considerations. The eyes of the whole assembly were turned on the Count de Mirabeau, who instantly replied to the Marquis de Brézé—*Oui, Monsieur, nous avons entendu les intentions qu'on a suggérées au Roi, & vous qui ne sauriez être son organe auprès des états généraux, vous qui n'avez ici ni place, ni voix, ni droit de parler, vous n'êtes pas fait pour nous rappeler son discours. Cependant pour éviter toute équivoque, & tout délai, je vous déclare que si l'on vous a chargé de nous faire sortir d'ici, vous devez demander des ordres pour employer la force, car nous ne quitterons nos places que par la puissance de la baïonnette.*—On which there was a general cry of—*Tel est le vœu de l'Assemblée.* They then immediately passed a confirmation of their preceding arrêts; and, on the motion of the Count de Mirabeau, a declaration that their persons, individually and collectively, were sacred; and that all who made any attempts against them should be deemed infamous traitors to their country.

The 24th. The ferment at Paris is beyond conception; 10,000 people have been all this day in the Palais Royal; a full detail of yesterday's proceedings was brought this morning, and read by many apparent leaders of little parties, with comments to the people. To my surprise, the King's propositions are received with universal disgust. He said nothing explicit on the periodical meeting of the states; he declared all the old feudal rights to be retained as property. These, and the change in the balance of representation in the provincial assemblies, are the articles that give the greatest offence. But, instead of looking to, or hoping for further concessions on these points, in order to make them more consonant to the general wishes, the people seem, with a sort of phrenzy, to reject all idea of compromise, and to insist on the necessity of the orders uniting, that full power may consequently reside in the commons, to effect what they call the regeneration of the kingdom; a favourite term, to which they affix no precise idea, but add the indefinite explanation of the general reform of all abuses. They are also full of suspicions at M. Necker's offering to resign, to which circumstance they seem to look more than to much more essential points. It is plain to me, from many conversations and harangues I have been witness to, that the constant meetings at the Palais Royal, which are carried to a degree of licentiousness and fury of liberty, that is scarcely credible, united with the innumerable inflammatory publications that have been hourly appearing since the assembly of the states, have so heated the people's expectations, and given them the idea of such total changes, that nothing the King or court could do, would now satisfy them; consequently it would be idleness itself to make concessions that are not steadily adhered to, not only to be observed by the King, but to be enforced on the people, and good order at the same time restored. But the stumbling-block to this and every plan that can be devised,

as the people know and declare in every corner, is the situation of the finances, which cannot possibly be restored but by liberal grants of the states on the one hand, or by a bankruptcy on the other. It is well known, that this point has been warmly debated in the council: Mons. Necker has proved to them, that a bankruptcy is inevitable, if they break with the states before the finances are restored; and the dread and terror of taking such a step, which no minister would at present dare to venture on, has been the great difficulty that opposed itself to the projects of the Queen and the Count d'Artois. The measure they have taken is a middle one, from which they hope to gain a party among the people, and render the deputies unpopular enough to get rid of them: an expectation, however, in which they will infallibly be mistaken. If, on the side of the people it be urged, that the vices of the old government make a new system necessary, and that it can only be by the firmest measures that the people can be put in possession of the blessings of a free government; it is to be replied, on the other hand, that the personal character of the King is a just foundation for relying that no measures of actual violence can be seriously feared: that the state of the finances, under any possible regimen, whether of faith or bankruptcy, must secure their existence, at least for time sufficient to secure by negotiation, what may be hazarded by violence; that by driving things to extremities, they risque an union between all the other orders of the state, with the parliaments, army, and a great body even of the people, who must disapprove of all extremities; and when to this is added the possibility of involving the kingdom in a civil war, now so familiarly talked of, that it is upon the lips of all the world, we must confess, that the commons, if they steadily refuse what is now held out to them, put immense and certain benefits to the chance of fortune, to that hazard which may make posterity curse, instead of bless, their memories as real patriots, who had nothing in view but the happiness of their country. Such an incessant buzz of politics has been in my ears for some days past, that I went to-night to the Italian opera, for relaxation. Nothing could be better calculated for that effect, than the piece performed, *La Villanella Rapita*, by Bianchi, a delicious composition. Can it be believed, that this people, who so lately valued nothing at an opera but the dances, and could hear nothing but a squall—now attend with feeling to Italian melodies, applaud with taste and rapture, and this without the meretricious aid of a single dance! The music of this piece is charming, elegantly playful, airy, and pleasing, with a duet, between Signora Mandini and Vigagnoni, of the first lustre. The former is a most fascinating singer—her voice nothing, but her grace, expression, soul, all strung to exquisite sensibility.

The 25th. The criticisms that are made on Mons. Necker's conduct, even by his friends, if above the level of the people, are severe. It is positively asserted,

serted, that Abbé Syeyes, Messrs. Mounier, Chapellier, Bernave, Target, Tourette, Rabaud, and other leaders, were almost on their knees to him, to insist peremptorily on his resignation being accepted, as they were well convinced that his retreat would throw the Queen's party into infinitely greater difficulties and embarrassment than any other circumstance. But his vanity prevailed over all their efforts, to listen to the insidious persuasions of the Queen, who spoke to him in the style of asking it as a request, that he would keep the crown on the King's head; at the same time that he yielded to do it, contrary to the interest of the friends of liberty, he seemed so pleased with the huzzas of the mob of Versailles, that it did much mischief. The ministers never go to and from the King's apartment on foot, across the court, which Mons. Necker took this opportunity of doing, though he himself had not done it in quiet times, in order to court the flattery of being called the father of the people, and moving with an immense and shouting multitude at his heels. Nearly at the time that the Queen, in an audience almost private, spoke as above to M. Necker, she received the deputation from the nobility, with the Dauphin in her hand, whom she presented to them, claiming of their honour, the protection of her son's rights; clearly implying, that if the step the King had taken was not steadily pursued, the monarchy would be lost, and the nobility sunk. While M. Necker's mob was heard through every apartment of the chateau, the King passed in his coach to Marly, through a dead and mournful silence—and that just after having given to his people, and the cause of liberty, more perhaps than ever any monarch had done before. Of such materials are all mobs made—so impossible is it to satisfy in moments like these, when the heated imagination dresses every visionary project of the brain in the bewitching colours of liberty. I feel great anxiety to know what will be the result of the deliberations of the commons, after their first protests are over, against the military violence which was so unjustifiably and injudiciously used. Had the King's proposition come after the supplies were granted, and on any inferior question, it would be quite another affair; but to offer this before one shilling is granted, or a step taken, makes all the difference imaginable.—Evening.—The conduct of the court is inexplicable, and without a plan: while the late step was taken, to secure the orders sitting separate, a great body of the clergy had been permitted to go to the commons, and the Duc d'Orleans, at the head of forty-seven of the nobility, has done the same: and, what is equally a proof of the unsteadiness of the court, the commons are in the common hall of the states, contrary to the express command of the King. The fact is, the *seance royale* was repugnant to the personal feelings of the King, and he was brought to it by the council, with much difficulty; and when it afterwards became necessary, as it did every hour, to give new and effective orders to support the system then laid down, it was
requisite

requisite to have a new battle for every point ; and thus the scheme was only opened, and not persisted in :—this is the report, and apparently authentic : it is easy to see, that that step had better, on a thousand reasons, not have been taken at all, for all vigour and effect of government will be lost, and the people be more assuming than ever. Yesterday, at Versailles, the mob was violent—they insulted, and even attacked all the clergy and nobility that are known to be strenuous for preserving the separation of orders. The Bishop of Beauvais had a stone on his head, that almost struck him down *. The Archbishop of Paris had all his windows broken, and forced to move his lodgings ; and the Cardinal de la Rochefoucauld hissed and hooted. The confusion is so great, that the court have only the troops to depend on ; and it is now said confidently, that if an order be given to the French guards to fire on the people, they will refuse obedience: this astonishes all, except those who know how they have been disgusted by the treatment, conduct, and manœuvres of the Duc de Chatelet, their colonel: so wretchedly have the affairs of the court, in every particular, been managed ; so miserable its choice of the men in offices, even such as are the most intimately connected with its safety, and even existence. What a lesson to princes, how they allow intriguing courtiers, women, and fools, to interfere, or assume the power that can be lodged, with safety, only in the hands of ability and experience ! It is asserted expressly, that these mobs have been excited and instigated by the leaders of the commons, and some of them paid by the Duc d'Orleans. The distraction of the ministry is extreme.—At night to the theatre *François* ; the Earl of Essex, and the *Maison de Moliere*.

The 26th. Every hour that passes seems to give the people fresh spirit: the meetings at the Palais Royal are more numerous, more violent, and more assured ; and in the assembly of electors, at Paris, for sending a deputation to the National Assembly, the language that was talked, by all ranks of people, was nothing less than a revolution in the government, and the establishment of a free constitution : what they mean by a free constitution, is easily understood—a *republic* ; for the doctrine of the times runs every day more and more to that point ; yet they profess, that the kingdom ought to be a monarchy too ; or, at least, that there ought to be a king. In the streets one is stunned by the hawkers of seditious pamphlets, and descriptions of pretended events, that all tend to keep the people equally ignorant and alarmed. The supineness, and even stupidity of the court, is without example: the moment demands the greatest decision—and yesterday, while it was actually a question, whether

* If they had treated him more severely, he would not have been an object of much pity. At a meeting of the Society of Agriculture in the country, where common farmers were admitted to dine with people of the first rank, this proud fool made difficulties of sitting down in such company.

he should be a Doge of Venice, or a King of France, the King went a hunting! The spectacle of the Palais Royal presented this night, till eleven o'clock, and, as we afterwards heard, almost till morning, is curious. The croud was prodigious, and fire-works of all sorts were played off, and all the building was illuminated: these were said to be rejoicings on account of the Duc d'Orleans and the nobility joining the commons; but united with the excessive freedom, and even licentiousness of the orators, who harangue the people; with the general movement which before was threatening, all this bustle and noise, which will not leave them a moment tranquil, has a prodigious effect in preparing them for whatever purposes the leaders of the commons shall have in view; consequently they are grossly and diametrically opposite to the interests of the court;—but all these are blind and infatuated. It is now understood by every body, that the King's offers, in the *seance royale*, are out of the question. The moment the commons found a relaxation, even in the trifling point of assembling in the great hall, they disregarded all the rest, and considered the whole as null, and not to be taken notice of, unless enforced in a manner of which there were no signs. They lay it down for a maxim, that they have a right to a great deal more than what the King touched on, but that they will accept of nothing as the concession of power: they will assume and secure all to themselves, as matters of right. Many persons I talk with, seem to think there is nothing extraordinary in this,—but it appears, that such pretensions are equally dangerous and inadmissible, and lead directly to a civil war, which would be the height of madness and folly, when public liberty might certainly be secured, without any such extremity. If the commons are to assume every thing as their right, what power is there in the state, short of arms, to prevent them from assuming what is not their right? They instigate the people to the most extensive expectations, and if they be not gratified, all must be confusion; and even the King himself, easy and lethargic as he is, and indifferent to power, will by and by be seriously alarmed, and ready to listen to measures, to which he will not at present give a moment's attention. All this seems to point strongly to great confusion, and even civil commotions; and to make it apparent, that to have accepted the King's offers, and made them the foundation of future negociation, would have been the wisest conduct—and with that idea I shall leave Paris.

The 27th. The whole business now seems over, and the revolution complete. The King has been frightened by the mobs into overturning his own act of the *seance royale*, by writing to the presidents of the orders of the nobility and clergy, requiring them to join the commons,—in direct contradiction to what he had ordained before. It was represented to him, that the want of bread was so great in every part of the kingdom, that there was no extremity to which the people might

not be driven: that they were nearly starving, and consequently ready to listen to any suggestions, and on the *qui vive* for all sorts of mischief: that Paris and Versailles would inevitably be burnt; and, in a word, that all sorts of misery and confusion would follow his adherence to the system announced in the *seance royale*. His apprehensions got the better of the party, who had for some days guided him; and he was thus induced to take this step, which is of such importance, that he will never more know where to stop, or what to refuse; or rather he will find, that in the future arrangement of the kingdom, his situation will be very nearly that of Charles I. a spectator, without power, of the effective resolutions of a long parliament. The joy this step occasioned was infinite; the whole assembly, uniting with the people, hurried to the chateau. *Vive le Roi* might have been heard at Marly: the King and Queen appeared in the balcony, and were received with the loudest shouts of applause; the leaders, who governed these motions, knew the value of the concession much better than those who made it. I have to-day had conversation with many persons on this business; and, to my amazement, there is an idea, and even among many of the nobility, that this union of the orders is only for the verification of their powers, and for *making the constitution*, which is a new term they have adopted; and which they use as if a constitution were a pudding to be made by a receipt. In vain I have asked, where is the power that can separate them hereafter, if the commons insist on remaining together, which may be supposed, as such an arrangement will leave all the power in their hands? And in vain I appeal to the evidence of the pamphlets written by the leaders of that assembly, in which they hold the English constitution cheap, because the people have not power enough, on account of that of the Crown and the House of Lords. The event now appears so clear, as not to be difficult to predict: all real power will be henceforward in the commons; having so much inflamed the people in the exercise of it, they will find themselves unable to use it temperately; the court cannot fit to have their hands tied behind them; the clergy, nobility, parliaments, and army, will, when they find themselves in danger of annihilation, unite in their mutual defence; but as such an union will demand time, they will find the people armed, and a bloody civil war must be the result. I have more than once declared this as my opinion, but do not find that others unite in it*. At all events, however, the tide now runs so strongly in favour of the people, and

* I may remark at present, long after this was written, that, although I was totally mistaken in my prediction, yet, on a revision, I think I had a reasonable ground for it, and that the common course of events would have produced such a civil war, to which every thing tended, from the moment the commons rejected the King's propositions of the *seance royale*, which I now think, more than ever, that they ought, with qualifications, to have accepted. The events that followed were as little to be thought of as of myself being made King of France.

the conduct of the court seems to be so weak, divided, and blind, that little can happen that will not clearly be dated from the present moment. Vigour and abilities would have turned every thing on the side of the court; for the great mass of nobility in the kingdom, the higher clergy, the parliaments, and the army, were with the crown; but this desertion of the conduct, that was necessary to secure its power, at a moment so critical, must lead to all sorts of pretensions. At night the fire-works, and illuminations, and mob, and noise, at the Palais Royal increased; the expence must be enormous; and yet nobody knows with certainty whence it arises: shops there are, however, that for 12 *sous*, give as many squibs and serpents as would cost five livres. There is no doubt of its being the Duc d'Orleans' money: the people are thus kept in a continual ferment, are for ever assembled, and ready to be in the last degree of commotion whenever called on by the men they have confidence in. Lately a company of Swifs would have crushed all this: a regiment would do it now if led with firmness; but, let it last a fortnight longer, and an army will be requisite.—At the play, *Mademoiselle Contá*, in the *Misanthrope* of Moliere, charmed me. She is truly a great actress; ease, grace, person, beauty, wit, and soul. Mola did the *misanthrope*, admirably. I will not take leave of the theatre François without once more giving it the preference to all I have ever seen.

I shall leave Paris truly rejoiced that the representatives of the people have it undoubtedly in their power so to improve the constitution of their country, as to render all great abuses in future, if not impossible, at least exceedingly difficult, and consequently will establish to all useful purposes an undoubted political liberty; and, if they effect this, it cannot be doubted but that they will have a thousand opportunities to secure to their fellow-subjects the invaluable blessing of civil liberty also. The state of the finances is such, that the government may easily be kept virtually dependent on the states, and their periodical existence absolutely secured. Such benefits will confer happiness on 25 millions of people; a noble and animating idea, that ought to fill the mind of every citizen of the world, whatever be his country, religion, or pursuit. I will not allow myself to believe for a moment, that the representatives of the people can ever so far forget their duty to the French nation, to humanity, and their own fame, as to suffer any inordinate and impracticable views,—any visionary or theoretic systems,—any frivolous ideas of speculative perfection; much less any ambitious private views, to impede their progress, or turn aside their exertions, from that security which is in their hands, to place on the chance and hazard of public commotion and civil war, the invaluable blessings which are certainly in their power. I will not conceive it possible, that men, who have eternal fame within their grasp, will place the rich inheritance on the cast of a die, and, losing the venture, be damned among the worst and most profligate adventurers that ever disgraced

humanity.—The Duc de Liancourt having made an immense collection of pamphlets, buying every thing that has a relation to the present period; and, among the rest, the cahiers of all the districts and towns of France of the three orders; it was a great object with me to read these, as I was sure of finding in them a representation of the grievances of the three orders, and an explanation of the improvements wished for in the government and administration; these cahiers being instructions given to their deputies, I have now gone through them all, with a pen in hand, to make extracts, and shall therefore leave Paris to-morrow.

The 28th. Having provided myself a light French cabriolet for one horse, or gig Anglois, and a horse, I left Paris, taking leave of my excellent friend, *Monf. Lazowski*, whose anxiety for the fate of his country made me respect his character as much as I had reason to love it for the thousand attentions I was in the daily habit of receiving from him. My kind protectress, the *Duchess d'Estillac*, had the goodness to make me promise, that I would return again to her hospitable hotel, when I had finished the journey I was about to undertake. Of the place I dined at on my road to Nangis, I forget the name, but it is a post-house on the left, at a small distance out of the road. It afforded me a bad room, bare walls, cold raw weather, and no fire; for, when lighted, it smoked too much to be borne;—I was thoroughly out of humour: I had passed some time at Paris amidst the fire, energy, and animation of a great revolution. And for those moments not filled by political events, I had enjoyed the resources of liberal and instructing conversation; the amusements of the first theatre in the world, and the fascinating accents of *Mandini*, had by turns soled and charmed the fleeting moments: the change to inns, and those French inns; the ignorance in all persons of those events that were now passing, and which so intimately concerned them; the detestable circumstance of having no newspapers, with a press much freer than the English, altogether formed such a contrast, that my heart sunk with depression. At Guignes, an itinerant dancing-master was fiddling to some children of tradesmen; to relieve my sadness, I became a spectator of their innocent pleasures, and, with great magnificence, I gave four 12*s.* pieces for a cake for the children, which made them dance with fresh animation; but my host, the postmaster, who is a furly pickpocket, thought that if I was so rich, he ought also to receive the benefit, and made me pay 9 *liv.* 10*s.* for a miserable tough chicken, a cutlet, a fallad, and a bottle of sorry wine. Such a dirty, pilfering disposition, did not tend to bring me into better humour.—30 miles.

The 29th. To Nangis, the chateau of which belongs to the *Marquis de Guerchy*, who last year at Caen had kindly made me promise to spend a few days here. A house almost full of company, and some of them agreeable, with
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the eagerness of Monf. de Guerchy for farming, and the amiable *naïveté* of the marchioness, whether in life, politics, or a farm, were well calculated to bring me into tune again. But I found myself in a circle of politicians, with whom I could agree in hardly any other particular, except the general one of cordially wishing that France might establish an indestructible system of liberty; but for the means of doing it, we were far as the poles asunder. The chaplain of Monf. de Guerchy's regiment, who has a cure here, and whom I had known at Caen, Monf. l'Abbé de —, was particularly strenuous for what is called the regeneration of the kingdom, by which it is impossible, from the explanation, to understand any thing more than a theoretic perfection of government; questionable in its origin, hazardous in its progress, and visionary in its end; but always presenting itself under a most suspicious appearance to me, because all its advocates, from the pamphlets of the leaders in the National Assembly, to the gentlemen who make its panegyric at present, affect to hold the constitution of England cheap in respect of liberty: and as that is unquestionably, and by their own admission the best the world ever saw, they profess to appeal from practice to theory, which, in the arrangement of a question of science, might be admitted, though with caution; but, in establishing the complex interest of a great kingdom, in *securing* freedom to 25 millions of people, seems to me the very acme of imprudence, the very quintessence of insanity. My argument was an appeal to the English constitution; take it at once, which is the business of a single vote; by your possession of a real and equal representation of the people, you have freed it from its only great objection; in the remaining circumstances, which are but of small importance, improve it—but improve it cautiously; for surely that ought to be touched with caution, which has given, from the moment of its establishment, felicity to a great nation; which has given greatness to a people designed by nature to be little; and, from being the humble copiers of every neighbour, has rendered them, in a single century, rivals of the most successful nations in those decorative arts that embellish human life; and the masters of the world in all those that contribute to its convenience. I was commended for my attachment to *what I thought was liberty*; but answered, that the King of France must have no *veto* on the will of the nation; and that the army must be in the hands of the provinces, with an hundred ideas equally impracticable and preposterous. Yet these are the sentiments which the court has done all in its power to spread through the kingdom; for will posterity believe, that while the press has swarmed with inflammatory productions, that tend to prove the blessings of theoretical confusion, and speculative licentiousness, not one writer of talents has been employed to refute and confound the fashionable doctrines, nor the least care taken to disseminate works of another complexion? By the way, when the court found that the states could not be
assembled

assembled on the old plan, and that great innovations must accordingly be made, they ought to have taken the constitution of England for their model; in the mode of assembling, they should have thrown the clergy and nobles into one chamber, with a throne for the King, when present. The commons should have assembled in another, and each chamber, as in England, should have verified its powers to itself only. And when the King held a *seance royale*, the commons should have been sent for to the bar of the lords, where seats should have been provided; and the King, in the edict that constituted the states, should have copied from England enough of the rules and orders of proceeding to prevent those preliminary discussions, which in France lost two months, and gave time for heated imaginations to work upon the people too much. By taking such steps, security would have been had, that if changes or events unforeseen arose, they would at least be met with in no such dangerous channel as another form and order of arrangement would permit.—15 miles.

The 30th. My friend's chateau is a considerable one, and much better built than was common in England in the same period, 200 years ago; I believe, however, that this superiority was universal in France, in all the arts. They were, I apprehend, in the reign of Henry IV. far beyond us in towns, houses, streets, roads, and, in short, in every thing. We have since, thanks to liberty, contrived to turn the tables on them. Like all the chateaus I have seen in France, it stands close to the town, indeed joining the end of it; but the back *front*, by means of some very judicious plantations, has entirely the air of the country, without the sight of any buildings. There the present marquis has formed an English lawn, with some agreeable winding walks of gravel, and other decorations, to skirt it. In this lawn they are making hay; and I have had the marquis, Monf. l'Abbé, and some others on the stack to shew them how to make and tread it: such hot politicians!—it is well they did not set the stack on fire. Nangis is near enough to Paris for *the people* to be politicians; the perruquier that dressed me this morning tells me, that every body is determined to pay no taxes, should the National Assembly so ordain.—But the soldiers will have something to say. No, Sir, never:—be assured as we are, that the French soldiers will never fire on the people: but, if they should, it is better to be shot than starved. He gave me a frightful account of the misery of the people; whole families in the utmost distress; those that work have a pay insufficient to feed them—and many that find it difficult to get work at all. I enquired of Monf. de Guerchy concerning this, and found it true. By order of the magistrates no person is allowed to buy more than two bushels of wheat at a market, to prevent monopolizing. It is clear to common sense, that all such regulations have a direct tendency to increase the evil, but it is in vain to reason with people whose ideas are immoveably fixed. Being here on a market-day, I attended, and saw the
wheat

wheat sold out under this regulation, with a party of dragoons drawn up before the market-cross to prevent violence. The people quarrel with the bakers, asserting the prices they demand for bread are beyond the proportion of wheat, and proceeding from words to scuffling, raise a riot, and then run away with bread and wheat for nothing: this has happened at Nangis, and many other markets; the consequence was, that neither farmers nor bakers would supply them till they were in danger of starving, and prices under such circumstances must necessarily rise enormously, which aggravated the mischief, till troops became really necessary to give security to those who supplied the markets. I have been sifting Madame de Guerchy on the expences of living; our friend Monf. L'Abbé joined the conversation, and I collect from it, that to live in a chateau like this, with six men-servants, five maids, eight horses, a garden, and a regular table, with company, but never to go to Paris, might be done for 1000 louis a year. It would in England cost 2000; the mode of living (not the price of things) is therefore cent. per cent. different.—There are gentlemen (noblesse) who live in this country on 6 or 8000 liv. (262l. to 350l.), that keep two men, two maids, three horses, and a cabriolet; there are the same in England, but they are fools. Among the neighbours who visited Nangis was Monf. Trudaine de Montigny, with his new and pretty wife, to return the first visit of ceremony: he has a fine chateau at Montigny, and an estate of 4000 louis a year. This lady was Mademoiselle de Cour Breton, niece to Madame Calonne; she was to have been married to the son of Monf. Lamoignon, but much against her inclinations; finding that common refusals had no avail, she determined on a very uncommon one, which was to go to church, in obedience to her father's orders, but to give a solemn NO instead of a *yea*. She was afterwards at Dijon, and never stirred but she was received with huzzas and acclamations by the people for refusing to be allied with la Cour Pleniére; and her firmness was every where spoken of much to her advantage. Monf. la Luzerne, nephew to the French ambassador at London, was there, and who informed me, that he had learned to box of Mendoza. No one can say that he has travelled without making acquisitions. Has the Duc d'Orleans also learned to box? The news from Paris is bad: the commotions increase greatly: and such an alarm has spread, that the Queen has called the Marechal de Broglie to the King's closet; he has had several conferences: the report is, that an army will be collected under him. It may be now necessary; but woeful management to have made it so.

JULY 2. To Meaux. Monf. de Guerchy was so kind as to accompany me to Columiers; I had a letter to Monf. Anveé Dumeé. Pass Rosoy to Maupertius, through a country cheerfully diversified by woods, and scattered with villages; and single farms spread every where as about Nangis. Maupertius seems to have been

been the creation of the Marquis de Montesquieu, who has here a very fine chateau of his own building; an extensive English garden, made by the Count d'Artois' gardener, with the town, has all been of his own forming. I viewed the garden with pleasure; a proper advantage has been taken of a good command of a stream, and many fine springs which rise in the grounds; they are well conducted, and the whole executed with taste. In the kitchen-garden, which is on the slope of a hill, one of these springs has been applied to excellent use: it is made to wind in many doubles through the whole on a paved bed, forming numerous basins for watering the garden, and might, with little trouble, be conducted alternately to every bed as in Spain. This is a hint of real utility to all those who form gardens on the sides of hills; for watering with pots and pails is a miserable, as well as expensive succedaneum to this infinitely more effective method. There is but one fault in this garden, which is its being placed near the house, where there should be nothing but lawn and scattered trees when viewed from the chateau. The road might be hidden by a judicious use of planting. The road to Columiers is admirably formed of broken stone, like gravel, by the Marquis of Montesquieu, partly at his own expense. Before I finish with this nobleman, let me observe, that he is esteemed by some the second family in France, and by others, who admit his pretensions, even the first; he claims from the house of Armagnac, which was undoubtedly from Charlemagne: the present King of France, when he signed some paper relative to this family, that seemed to admit the claim, or refer to it, remarked, that it was declaring one of his subjects to be a better gentleman than himself. But the house of Montmorenci, of which family are the Dukes of Luxembourg and Laval, and the Prince of Robec, is generally admitted to be the first. Mons. de Montesquieu is a deputy in the states, one of the *quarante* in the French academy, having written several pieces: he is also chief minister to Monsieur, the King's brother, an office that is worth 100,000 liv. a year (4,375l.) Dine with Mons. and Madame Dumeé; conversation here, as in every other town of the country, seems more occupied on the dearth of wheat than on any other circumstance; yesterday was market-day, and a riot ensued of the populace, in spite of the troops, that were drawn up as usual to protect the corn: it rises to 46 liv. (2l. 3d.) the septier, or half-quarter,—and some is sold yet higher. To Meaux.—32 miles.

The 3d. Meaux was by no means in my direct road; but its district, Brie is so highly celebrated for fertility, that it was an object not to omit. I was provided with letters for M. Bernier, a considerable farmer, at Chaucaunin, near Meaux; and for M. Gibert, of Neuf Moutier, a considerable cultivator, whose father and himself had between them made a fortune by agriculture. The former gentleman was not at home; by the latter I was received with great hospitality; and I found in him the strongest desire to give me every in-

formation

formation I wished. Monf. Gibert has built a very handsome and commodious house, with farming-offices, on the most ample and solid scale. I was pleased to find his wealth, which is not inconsiderable, to have arisen wholly from the plough. He did not forget to let me know, that he was noble, and exempted from all tailles; and that he had the honours of the chace, his father having purchased the charge of *Secrétaire du Roi*: but he very wisely lives *en fermier*. His wife made ready the table for dinner, and his bailiff, with the female domestic, who has the charge of the dairy, &c. both dined with us. This is in a true farming style; it has many conveniencies, and looks like a plan of living, which does not promise, like the foppish modes of little gentlemen, to run through a fortune, from false shame and silly pretensions. I can find no other fault with his system than having built a house enormously beyond his plan of living, which can have no other effect than tempting some successor, less prudent than himself, into expences that might dissipate all his and his father's savings. In England that would certainly be the case; the danger, however, is not equal in France.

The 4th. To Chateau Thiery, following the course of the Marne. The country is pleasantly varied, and hilly enough to be rendered a constant picture, were it inclosed. Thiery is beautifully situated on the same river. I arrived there by five o'clock, and wished, in a period so interesting to France, and indeed to all Europe, to see a newspaper. I asked for a coffee-house, not one in the town. Here are two parishes, and some thousands of inhabitants, and not a newspaper to be seen by a traveller, even in a moment when all ought to be anxiety.—What stupidity, poverty, and want of circulation! This people hardly deserve to be free; and should there be the least attempt with vigour to keep them otherwise, it can hardly fail of succeeding. To those who have been used to travel amidst the energetic and rapid circulation of wealth, animation, and intelligence of England, it is not possible to describe, in words adequate to one's feelings, the dulness and stupidity of France. I have been to-day on one of their greatest roads, within thirty miles of Paris, yet I have not seen one diligence, and met but a single gentleman's carriage, nor any thing on the road that looked like a gentleman.—30 miles.

The 5th. To Mareuil. The Marne, about 25 rods broad, flows in an arable vale to the right. The country hilly, and parts of it pleasant; from one elevation there is a noble view of the river. Mareuil is the residence of Monf. Le Blanc, of whose husbandry and improvements, particularly in sheep of Spain, and cows of Switzerland, Monf. de Brouffonet had spoken very advantageously. This was the gentleman also on whom I depended for information relative to the famous vineyards of Epernay, that produce the fine Champagne. What therefore was my disappointment, when his servants informed me that he was

nine leagues off on business? Is Madame Le Blanc at home? *No, she is at Dormans.* My complaining ejaculations were interrupted by the approach of a very pretty young lady, whom I found to be Mademoiselle Le Blanc. *Her mama would return to dinner, her papa at night; and, if I wished to see him, I had better stay.* When persuasion takes so pleasing a form, it is not easy to resist it. There is a manner of doing every thing that either leaves it absolutely indifferent or that interests. The unaffected good humour and simplicity of Mademoiselle Le Blanc entertained me till the return of her mama, and made me say to myself, *you will make a good farmer's wife.* Madame Le Blanc, when she returned, confirmed the native hospitality of her daughter; assured me, that her husband would be at home early in the morning, as she must dispatch a messenger to him on other business. In the evening we supped with Monf. B. in the same village, who married Madame Le Blanc's niece; we pass Mareuil, through it, has the appearance of a small hamlet of inconsiderable farmers, with the houses of their labourers; and the sentiment that would arise in most bosoms, would be that of picturing the banishment of being condemned to live in it. Who would think that there should be two gentlemen's families in it; and that in one I should find Mademoiselle Le Blanc singing to her sister, and in the other Madame B. young and handsome, performing on an excellent English piano forte? Compared notes of the expences of living in Champagne and Suffolk;—agreed, that 100 louis d'or a year in Champagne, were as good an income as 180 in England. On his return, Monf. Le Blanc, in the most obliging manner, satisfied all my enquiries, and gave me letters for the most celebrated wine districts.

The 7th. To Epernay, famous for its wines. I had letters for Monf. Paretilaine, one of the most considerable merchants, who was so obliging as to enter, with two other gentlemen, into a minute disquisition of the produce and profit of the fine vineyards. The *hotel de Rohan* here is a very good inn, where I solaced myself with a bottle of excellent *vin mousseux* for 40*s.* and drank prosperity to *true* liberty in France.—12 miles.

The 8th. To Ay, a village not far out of the road to Rheims, very famous for its wines. I had a letter for Monf. Lafnier, who has 60,000 bottles in his cellar, but unfortunately he was not at home. Monf. Dorfé has from 30 to 40,000. All through this country the crop promises miserably, not on account of the great frost, but the cold weather of last week.

To Rheims, through a forest of five miles, on the crown of the hill, which separates the narrow vale of Epernay from the great plain of Rheims. The first view of that city from this hill, just before the descent, at the distance of about four miles, is magnificent. The cathedral makes a great figure, and the church of St. Remy terminates the town proudly. Many times I have had
such

such a view of towns in France, but when you enter them, all is a clutter of narrow, crooked, dark, and dirty lanes. At Rheims it is very different: the streets are almost all broad, strait, and well built, equal in that respect to any I have seen; and the inn, the *hotel de Moulinet*, is so large and well-served as not to check the emotions raised by agreeable objects, by giving an impulse to contrary vibrations in the bosom of the traveller, which at inns in France is too often the case. At dinner they gave me a bottle also of excellent wine. I suppose fixed air is good for the rheumatism; I had some writhes of it before I entered Champagne, but the *vin mousséux* has absolutely banished it. I had letters for Monf. Cadot L'ainé, a considerable manufacturer, and the possessor of a large vineyard, which he cultivates himself; he was therefore a double fund to me. He received me very politely, answered my enquiries, and shewed me his fabric.—The cathedral is large, but does not strike me like that of Amiens, yet ornamented, and many painted windows. They shewed me the spot where the kings are crowned. You enter and quit Rheims through superb and elegant iron gates: in such public decorations, promenades, &c. French towns are much beyond English ones. Stopped at Sillery, to view the wine press of the Marquis de Sillery; he is the greatest wine-farmer in all Champagne, having in his own hands 180 arpents. Till I got to Sillery, I knew not that it belonged to the husband of Madame de Genlis; but I determined, on hearing that it did, to presume to introduce myself to the marquis, should he be at home: I did not like to pass the door of Madame de Genlis without seeing her: her writings are too celebrated. *La Petite Loge*, where I slept, is bad enough indeed, but such a reflection would have made it ten times worse: the absence, however, of both Monf. and Madame quieted both my wishes and anxieties. He is in the states.—28 miles.

The 9th. To Chalons, through a poor country and poor crops. M. de Brouffonet had given me a letter to Monf. Sabbatier, secretary to the Academy of Sciences, but he was absent. A regiment passing to Paris, an officer at the inn addressed me in English.—He had learned, he said, in America, damme!—He had taken Lord Cornwallis, damme!—Marechal Broglie was appointed to command an army of 50,000 men near Paris—it was necessary—the *tiers état* were running mad—and wanted some wholesome correction;—they want to establish a republic—absurd! Pray, Sir, what did you fight for in America? To establish a republic. What was so good for the Americans, is it so bad for the French? Aye, damme! that is the way the English want to be revenged. It is, to be sure, no bad opportunity. Can the English follow a better example? He then made many enquiries about what we thought and said upon it in England: and I may remark, that almost every person I meet with has the same idea—*The English must be very well contented at our confusion*. They feel pretty pointedly what they deserve.—12½ miles.

The 10th. To Ove. Pass Courtisfeau, a small village, with a great church; and though a good stream is here, not an idea of irrigation. Roofs of houses almost flat, with projecting eaves, resembling those from Pau to Bayonne. At St. Menchoud a dreadful tempest, after a burning day, with such a fall of rain, that I could hardly get to Monf. l'Abbé Michel, to whom I had a letter. When I found him, the incessant flashes of lightning would allow me no conversation; for all the females of the house came into the room for the Abbé's protection I suppose, so I took leave. The *vin de Champagne*, which is 40*s.* at Rheims, is 3 liv. at Chalons and here, and execrably bad; so there is an end of my physic for the rheumatism.—25 miles.

The 11th. Pass Islets, a town (or rather collection of dirt and dung) of new features, that seem to mark, with the faces of the people, a country not French.—25 miles.

The 12th. Walking up a long hill, to ease my mare, I was joined by a poor woman, who complained of the times, and that it was a sad country; on my demanding her reasons, she said her husband had but a morsel of land, one cow, and a poor little horse, yet he had a *franchar* (42 lb.) of wheat, and three chickens, to pay as a quit-rent to one Seigneur; and four *franchar* of oats, one chicken and 1*s.* to pay to another, beside very heavy tailles and other taxes. She had seven children, and the cow's milk helped to make the soup. But why, instead of a horse, do not you keep another cow? Oh, her husband could not carry his produce so well without a horse; and asses are little used in the country. It was said, at present, that *something was to be done by some great folks for such poor ones, but she did not know who nor how, but God send us better, car les tailles & les droits nous écrasent.*—This woman, at no great distance, might have been taken for sixty or seventy, her figure was so bent, and her face so furrowed and hardened by labour,—but she said she was only twenty-eight. An Englishman, who has not travelled, cannot imagine the figure made by infinitely the greater part of the countrywomen in France; it speaks, at the first sight, hard and severe labour: I am inclined to think, that they work harder than the men, and this, united with the more miserable labour of bringing a new race of slaves into the world, destroys absolutely all symmetry of person and every feminine appearance. To what are we to attribute this difference in the manners of the lower people in the two kingdoms? To GOVERNMENT.—23 miles.

The 13th. Leave Mar-le-Tour at four in the morning: the village herdsman was founding his horn; and it was droll to see every door vomiting out its hogs or sheep, and some a few goats, the flock collecting as it advances. Very poor sheep, and the pigs with mathematical backs, large segments of small circles. They must have abundance of commons here, but, if I may judge by the report of the animals carcases, dreadfully overstocked. To Metz, one of
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the strongest places in France ; pass three draw-bridges, but the command of water must give a strength equal to its works. The common garrison is 10,000 men, but there are fewer at present. Waited on M. de Payen, secretary of the Academy of Sciences ; he asked my plan, which I explained ; he appointed me at four in the afternoon at the academy, as there would be a *seance* held ; and he promised to introduce me to some persons who could answer my enquiries. I attended accordingly, when I found the academy assembled at one of their weekly meetings. Monf. Payen introduced me to the members, and, before they proceeded to their business, they had the goodness to sit in council on my enquiries, and to resolve many of them. In the *Almanach de Trois Evechés*, 1789, this academy is said to have been instituted particularly for agriculture ; I turned to the list of their honorary members to see what attention they had paid to the men who, in the present age, have advanced that art. I found an Englishman, Dom Cowley, of London. Who is Dom Cowley ?—Dined at the table d'hôte, with seven officers, out of whose mouths, at this important moment, in which conversation is as free as the press, not one word issued for which I would give a straw, nor a subject touched on of more importance, than a coat, or a puppy dog. At tables de hôtes of officers, you have a voluble garniture of bawdry or nonsense ; at those of merchants, a mournful and stupid silence. Take the mass of mankind, and you have more good sense in half an hour in England than in half a year in France.—Government ! Again :—all—all—is government. —15 miles.

The 14th. They have a *cabinet littéraire* at Metz, something like that I described at Nantes, but not on so great a plan ; and they admit any person to read or go in and out for a day, on paying 4s. To this I eagerly resorted, and the news from Paris, both in the public prints, and by the information of a gentleman, I found to be interesting. Versailles and Paris are surrounded by troops : 35,000 men are assembled, and 20,000 more on the road, large trains of artillery collected, and all the preparations of war. The assembling of such a number of troops has added to the scarcity of bread ; and the magazines that have been made for their support are not easily by the people distinguished from those they suspect of being collected by monopolists. This has aggravated their evils almost to madness ; so that the confusion and tumult of the capital are extreme. A gentleman of an excellent understanding, and apparently of consideration, from the attention paid him, with whom I had some conversation on the subject, lamented, in the most pathetic terms, the situation of his country ; he considers a civil war as impossible to be avoided. There is not, he added, a doubt but the court, finding it impossible to bring the National Assembly to terms, will get rid of them ; a bankruptcy at the same moment is inevitable ; the union of such confusion must be a civil war ; and it is now only by torrents
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of blood that we have any hope of establishing a freer constitution : yet it must be established ; for the old government is rivetted to abuses that are insupportable. He agreed with me entirely, that the propositions of the *seance royale*, though certainly not sufficiently satisfactory, yet, were the ground for a negotiation, that would have secured by degrees *all even that the sword can give us, let it be as successful as it will. The purse—the power of the purse is every thing ; skilfully managed, with so necessitous a government as ours, it would, one after another, have gained all we wished. As to a war, Heaven knows the event ; and if we have success, success itself may ruin us ; France may have a Cromwell in its bosom, as well as England.* Metz is, without exception, the cheapest town I have been in. The table d'hôte is 36*s.* a head, plenty of good wine included. We were ten, and had two courses and a dessert of ten dishes each, and those courses plentiful. The supper is the same ; I had mine, of a pint of wine and a large plate of chaudiés, in my chamber, for 10*s.* a horse, hay, and corn 25*s.* and nothing for the apartment ; my expence was therefore 71*s.* a day, or 2*s.* 11½*d.* ; and with the table d'hôte for supper, would have been but 97*s.* or 4*s.* 0½*d.*—In addition, much civility and good attendance. It is at the *Faisan*. Why are the cheapest inns in France the best ?—The country to Pont-a-Mousson is all of bold features.—The river Moselle, which is considerable, runs in the vale, and the hills on each side are high. Not far from Metz there are the remains of an ancient aqueduct for conducting the waters of a spring across the Moselle : there are many arches left on this side, with the houses of poor people built between them. At Pont-a-Mousson Mons. Pichon, the sub-delegué of the intendant, to whom I had letters, received me politely, satisfied my enquiries, which he was well able to do from his office, and conducted me to see whatever was worth viewing in the town. It does not contain much ; the *école militaire*, for the sons of the poor nobility, also the *couvent de Premontré*, which has a very fine library, 107 feet long and 25 broad. I was introduced to the abbot as a person who had some knowledge in agriculture.—17 miles.

The 15th. I went to Nancy, with great expectation, having heard it represented as the prettiest town in France. I think, on the whole, it is not undeserving the character in point of building, direction, and breadth of streets.—Bourdeaux is far more magnificent ; Bayonne and Nantes are more lively ; but there is more equality in Nancy ; it is almost all good ; and the public buildings are numerous. The *place royale*, and the adjoining area are superb. Letters from Paris ! all confusion ! the ministry removed : Mons. Necker ordered to quit the kingdom without noise. The effect on the people of Nancy was considerable.—I was with Mons. Willemet when his letters arrived, and for some time his house was full of enquirers ; all agreed, that it was fatal news, and that it would occasion great commotions. *What will be the result*

sult at Nancy? The answer was in effect the same from all I put this question to: *We are a provincial town, we must wait to see what is done at Paris; but every thing is to be feared from the people, because bread is so dear, they are half starved, and are consequently ready for commotion.*—This is the general feeling; they are as nearly concerned as Paris; but they dare not stir; they dare not even have an opinion of their own till they know what Paris thinks; so that if a starving populace were not in question, no one would dream of moving. This confirms what I have often heard remarked, that the *deficit* would not have produced the revolution but in concurrence with the price of bread. Does not this shew the infinite consequence of great cities to the liberty of mankind? Without Paris, I question whether the present revolution, which is rapidly working in France, could possibly have had an origin. It is not in the villages of Syria or Diarbekir that the Grand Signor meets with a murmur against his will; it is at Constantinople that he is obliged to manage and mix caution even with despotism. Mr. Willemet, who is demonstrator of botany, shewed me the botanical garden, but it is in a condition that speaks the want of better funds. He introduced me to Monf. Durival, who has written on the vine, and gave me one of his treatises, and also two of his own on botanical subjects. He also conducted me to Monf. l'Abbé Grandpère, a gentleman curious in gardening, who, as soon as he knew that I was an Englishman, whimsically took it into his head to introduce me to a lady, my countrywoman, who hired, he said, the greatest part of his house. I remonstrated against the impropriety of this, but all in vain; the Abbé had never travelled, and thought that if he were at the distance of England from France (the French are not commonly good geographers) he should be very glad to see a Frenchman; and that, by parity of reasoning, this lady must be the same to meet a countryman she never saw or heard of. Away he went, and would not rest till I was conducted into her apartment. It was the Dowager Lady Douglas; she was unaffected, and good enough not to be offended at such a strange intrusion.—She had been here but a few days; had two fine daughters with her, and a beautiful Kamchatka dog; she was much troubled with the intelligence her friends in the town had just given her, since she would, in all probability, be forced to move again, as the news of Monf. Necker's removal, and the new ministry being appointed, would certainly occasion such dreadful tumults, that a foreign family would probably find it equally dangerous and disagreeable.—18 miles.

The 16th. All the houses at Nancy have tin eave troughs and pipes, which render walking in the streets much more easy and agreeable; it is also an additional consumption, which is politically useful. Both this place and Luneville are lighted in the English manner, instead of the lamps being strung across the streets as in other French towns. Before I quit Nancy, let me caution the un-

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wary traveller, if he is not a great lord, with plenty of money that he does not know what to do with, against the *hotel d'Angleterre*; a bad dinner 3 liv. and for the room as much more. A pint of wine, and a plate of *chaudié* 20*s.* which at Metz was 10*s.* and in addition, I liked so little my treatment, that I changed my quarters to the *hotel de Halle*, where, at the table d'hôte, I had the company of some agreeable officers, two good courses, and a dessert for 36*s.* with a bottle of wine. The chamber 20*s.*; for building, however, the *hotel d'Angleterre* is much superior, and is the first inn. In the evening to Luneville. The country about Nancy is pleasing.—17 miles.

The 17th. Luneville being the residence of Monsr. Lazowski, the father of my much esteemed friend, who was advertised of my journey, I waited on him in the morning; he received me with not politeness only, but hospitality—with a hospitality I began to think was not to be found on this side of the kingdom.—From Mareuil hither, I had really been so unaccustomed to receive any attentions of that sort, that it awakened me to a train of new feelings agreeably enough.—An apartment was ready for me, which I was pressed to occupy, desired to dine, and expected to stay some days: he introduced me to his wife and family, particularly to M. l'Abbé Lazowski, who, with the most obliging alacrity, undertook the office of shewing me whatever was worth seeing.—We examined, in a walk before dinner, the establishment of the orphans; well regulated and conducted. Luneville wants such establishments, for it has no manufactory, and therefore is very poor; I was assured not less than half the population of the place, or 10,000 persons are poor. Luneville is cheap. A cook's wages two, three, or four louis; a maid's, that dresses hair, three or four louis; a common housemaid, one louis; a common footman, or a house lad, three louis. Rent of a good house sixteen or seventeen louis. Lodgings of four or five rooms, some of them small, nine louis. After dinner, wait on M. Vaux dit Pomponne, an intimate acquaintance of my friend; here mingled hospitality and politeness also received me; and so much was I pressed to dine with him to-morrow, that I should certainly stay, were it merely for the pleasure of more conversation with a very sensible and cultivated man, who, though advanced in years, has the talents and good humour to render his company universally agreeable: but I was obliged to refuse it, having been out of order all day. Yesterday's heat was followed, after some lightning, by a cold night, and I laid, without knowing it, with the windows open, and caught cold, I suppose, from the information of my bones. I am acquainted with strangers as easily and quickly as any body, a habit that much travelling can scarcely fail to give, but to be ill among them would be *enuyante*, demand too much attention, and encroach on their humanity. This induced me to refuse the obliging wishes of both the Messrs. Lazowski's, Monsr. Pomponne, and also of a pretty and agreeable American lady, I met at the house of the latter. Her
history

history is singular, and yet very natural. She was Miss Blake, of New-York; what carried her to Dominica I know not; but the sun did not spoil her complexion: a French officer, Monf. Tibalié, on taking the island, made her his captive, and in turn became hers, fell in love, and married her; brought his prize to France, and settled her in his native town of Luneville. The regiment, of which he is major, being quartered in a distant province, she complained of seeing her husband not more than for six months in two years. She has been four years at Luneville; and having the society of three children, is reconciled to a scene of life new to her. Monf. Pomponne, who, she assured me, is one of the best men in the world, has parties every day at his house, not more to his own satisfaction than to her comfort.—This gentleman is another instance, as well as the major, of attachment to the place of nativity; he was born at Luneville; attended King Stanislaus in some respectable office, near his person; has lived much at Paris, and with the great, and had first ministers of state for his intimate friends; but the love of the *natale solum* brought him back to Luneville, where he has lived beloved and respected for many years, surrounded by an elegant collection of books, amongst which the poets are not forgotten, having himself no inconsiderable talents in transfusing agreeable sentiments into pleasing verses. He has some couplets of his own composition, under the portraits of his friends, which are pretty and easy. It would have given me much pleasure to have spent some days at Luneville; an opening was made for me in two houses, where I should have met with a friendly and agreeable reception: but the misfortunes of travelling are sometimes the accidents that cross the moments prepared for enjoyment; and at others, the system of a journey inconsistent with the plans of destined pleasure.

The 18th. To Haming, through an uninteresting country.—28 miles.

The 19th. To Savern, in Alsace: the country to Phalsbourg, a small fortified town, on the frontiers, is much the same in appearance as hitherto. The women in Alsace wear straw hats, as large as those worn in England; they shelter the face, and should secure some pretty country girls, but I have seen none yet. Coming out of Phalsbourg, there are some hovels miserable enough, yet have chimnies and windows, but the inhabitants in the lowest poverty. From that town to Savern all a mountain of oak timber, the descent steep, and the road winding. In Savern, I found myself to all appearance truly in Germany; for two days past much tendency to a change, but here not one person in an hundred has a word of French; the rooms are warmed by stoves; the kitchen-hearth is three or four feet high, and various other trifles shew, that you are among another people. Looking at a map of France, and reading histories of Louis XIV. never threw his conquest or seizure of Alsace into the same light, which travelling into it did: to cross a great range of mountains; to

enter a level plain, inhabited by a people totally distinct and different from France, with manners, language, ideas, prejudices, and habits all different, made an impression of the injustice and ambition of such a conduct, much more forcible than ever reading had done: so much more powerful are things than words.—22 miles.

The 20th. To Strasbourg, through one of the richest scenes of soil and cultivation to be met with in France, and exceeded by Flanders only. I arrived at Strasbourg at a critical moment, which I thought would have broken my neck; a detachment of horse, with their trumpets on one side, a party of infantry, with their drums beating on the other, and a great mob hallooing, frightened my French mare; and I could scarcely keep her from trampling on Messrs. the *tiers état*. On arriving at the inn, hear the interesting news of the revolt of Paris.—The *Gardes Françaises* joining the people; the little dependence on the rest of the troops; the taking of the Bastile; and the institution of the *milice bourgeoise*; in a word, of the absolute overthrow of the old government. Every thing being now decided, and the kingdom in the hands of the assembly, they have the power to make a new constitution, such as they think proper; and it will be a great spectacle for the world to view, in this enlightened age, the representatives of twenty-five millions of people sitting on the construction of a new and better order and fabric of liberty, than Europe has yet offered. It will now be seen, whether they will copy the constitution of England, freed from its faults, or attempt, from theory, to frame something absolutely speculative: in the former case, they will prove a blessing to their country; in the latter, they will probably involve it in inextricable confusions and civil wars, perhaps not in the present period, but certainly at some future one. I hear not of their removing from Versailles; if they stay there under the controul of an armed mob, they must make a government that will please the mob; but they will, I suppose, be wise enough to move to some central town, Tours, Blois, or Orleans, where their deliberations may be free. But the Parisian spirit of commotion spreads quickly; it is here; the troops, that were near breaking my neck, are employed to keep an eye on the people who shew signs of an intended revolt. They have broken the windows of some magistrates that are no favourites; and a great mob of them is at this moment assembled, demanding clamourously to have meat at 5*s*. a pound. They have a cry among them that will conduct them to good lengths,—*Point d'impôt & vivent les états*.—Waited on Monsr. Herman, professor of natural history in the University here, to whom I had letters: he replied to some of my questions, and introduced me for others to Monsr. Zimmer, who having been in some degree a practitioner, had understanding enough of the subject to afford me some information that was valuable. View the public buildings, and cross
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the Rhine passing for some little distance into Germany, but no new features to mark a change; Alsace is Germany, and the change great on descending the mountains. The exterior of the cathedral is fine, and the tower singularly light and beautiful; it is well known to be one of the highest in Europe; commands a noble and rich plain, through which the Rhine, from the number of its islands, has the appearance of a chain of lakes rather than of a river.— Monument of Marechal Saxe, &c. &c. I am puzzled about going to Carlsruhe, the residence of the Margrave of Baden: it was my intention formerly to do it, if ever I were within an hundred miles; for there are some features in the reputation of that sovereign, which made me wish to be there. He fixed Mr. Taylor, of Bifrons in Kent, whose husbandry I describe in my Eastern Tour, on a large farm; and the *œconomistes* in their writings, or rather Physiocratical rubbish, speak much of an experiment he made, which, however erroneous their principles might be, marked much merit in the prince. Monsf. Herman tells me also, that he has sent a person into Spain to purchase rams for the improvement of wool. I wish he had fixed on somebody likely to understand a good ram, which a professor of botany is not likely to do too well. This botanist is the only person Monsf. Herman knows at Carlsruhe, and therefore can give me no letter thither, and how I can go, unknown to all the world, to the residence of a sovereign prince, (for Mr. Taylor has left him) is a difficulty apparently insurmountable.— 22½ miles.

The 21st. I have spent some time this morning at the *cabinet littéraire*, reading the gazettes and journals that give an account of the transactions at Paris: and I have had some conversation with several sensible and intelligent men on the present revolution. The spirit of revolt is gone forth into various parts of the kingdom; the price of bread has prepared the populace every where for all sorts of violence; at Lyons there have been commotions as furious as at Paris, and the same at a great many other places: Dauphiné is in arms: and Bretagne in absolute rebellion. The idea is, that the people will, from hunger, be driven to revolt; and when once they find any other means of subsistence than that of honest labour, every thing will be to be feared. Of such consequence it is to a country, and indeed to every country, to have a good police of corn; a police that shall, by securing a high price to the farmer, encourage his culture enough to secure the people at the same time from famine. My anxiety about Carlsruhe is at an end; the Margrave is at Spaw; I shall not therefore think of going.—Night—I have been witness to a scene curious to a foreigner; but dreadful to Frenchmen that are considerate. Passing through the square of the *hotel de ville*, the mob were breaking the windows with stones, notwithstanding an officer and a detachment of horse were in the square.

Perceiving that their numbers not only increased, but that they grew bolder and bolder every moment, I thought it worth staying to see what it would end in, and clambered on to the roof of a row of low stalls opposite to the building, against which their malice was directed. Here I beheld the whole commodiously. Finding that the troops would not attack them, except in words and menaces, they grew more violent, and furiously attempted to beat the doors in pieces with iron crows; placing ladders to the windows. In about a quarter of an hour, which gave time for the assembled magistrates to escape by a back door, they burst all open, and entered like a torrent with an universal shout of the spectators. From that minute a shower of casements, sashes, shutters, chairs, tables, sofas, books, papers, pictures, &c. rained incessantly from all the windows of the house, which is seventy or eighty feet long, and which was then succeeded by tiles, skirting boards, bannisters, framework, and every part of the building that force could detach. The troops, both horse and foot, were quiet spectators. They were at first too few to interpose, and, when they became more numerous, the mischief was too far advanced to admit of any other conduct than guarding every avenue around, permitting none to go to the scene of action, but letting every one that pleased retire with his plunder; guards being at the same time placed at the doors of the churches, and all public buildings. I was for two hours a spectator at different places of the scene, secure myself from the falling furniture, but near enough to see a fine youth crushed to death by something, as he was handing plunder to a woman, I suppose his mother, from the horror that was pictured in her countenance. I remarked several common soldiers, with their white cockades, among the plunderers, and instigating the mob even in sight of the officers of the detachment. There were amongst them people so decently dressed, that I regarded them with no small surprise:—they destroyed all the public archives; the streets for some way around strewed with papers; this has been a wanton mischief; for it will be the ruin of many families unconnected with the magistrates.

The 22d. To Schelestadt. At Strasbourg, and the country I passed, the lower ranks of women wear their hair in a toupee in front, and behind braided into a circular plait, three inches thick, and most curiously contrived to convince one that they rarely pass a comb through it. I could not but picture them as the *nidus* of living colonies, that never approached me (they are not burthened with too much beauty), but I scratched my head from sensations of imaginary itching. The moment you are out of a great town all in this country is German; the inns have one common large room, many tables and cloths ready spread, where every company dines; gentry at some, and the poor at others. Cookery also German: *schnitz* is a dish of bacon and fried pears; has the appearance

pearance of an infamous mess ; but I was surprized, on tasting, to find it better than passable. At Schelestadt I had the pleasure of finding the Count de la Rochefoucauld, whose regiment (of Champagne), of which he is second major, is quartered here. No attentions could be kinder than what I received from him ; they were the renewal of the numerous ones I was in the habit of experiencing from his family ; and he introduced me to a good farmer, from whom I had the intelligence I wanted.—25 miles.

The 23d. An agreeable quiet day, with the Count de la Rochefoucauld : dine with the officers of the regiment, the Count de Loumené, the colonel, nephew to the Cardinal de Loumené, present. Sup at my friend's lodgings ; an officer of infantry, a Dutch gentleman, who has been much in the East-Indies, and speaks English. This has been a refreshing day ; the society of well informed people, liberal, polite, and communicative, has been a contrast to the *sombre* stupidity of tables d'hôtes.

The 24th. To Isenheim, by Colmar. The country is in general a dead level, with the Voge mountains very near to the right ; those of Suabia to the left ; and there is another range very distant, that appears in the opening to the south. The news at the table d'hôte at Colmar curious, that the Queen had a plot, nearly on the point of execution, to blow up the National Assembly by a mine, and to march the army instantly to massacre all Paris. A French officer present presumed but to doubt of the truth of it, and was immediately over-powered with numbers of tongues. A deputy had written the news ; they had seen the letter, and not a hesitation could be admitted : I strenuously contended, that it was folly and nonsense, a mere invention to render persons odious who, for what I knew, might deserve to be so, but certainly not by such means ; if the angel Gabriel had descended and taken a chair at table to convince them, it would not have shaken their faith. Thus it is in revolutions, one rascal writes, and an hundred thousand fools believe.—25 miles.

The 25th. From Isenheim, the country changes from the dead flat, to pleasant views and inequalities, improving all the way to Befort, but neither scattered houses nor inclosures. Great riots at Befort :—last night a body of mob and peasants demanded of the magistrates the arms in the magazine, to the amount of three or four thousand stands ; being refused, they grew riotous, and threatened to set fire to the town, on which the gates were shut ; and to-day the regiment of Bourgogne arrived for their protection. Mons. Necker passed here to-day in his way from Basle to Paris, escorted by 50 bourgeois horsemen, and through the town by the music of all the troops. But the most brilliant period of his life is past ; from the moment of his reinstatement in power to the assembling of the states, the fate of France, and of the Bourbons, was then in his hands ; and whatever may be the result of the
present

present confusions they will, by posterity, be attributed to his conduct, since he had unquestionably the power of assembling the states in whatever form he pleased: he might have had two chambers, three, or one; he might have given what would unavoidably have melted into the constitution of England; all was in his hands; he had the greatest opportunity of political architecture that ever was in the power of man: the great legislators of antiquity never possessed such a moment: in my opinion he missed it completely, and threw that to the chance of the winds and waves, to which he might have given impulse, direction, and life. I had letters to Mons. de Bellonde, *commissaire de Guerre*; I found him alone: he asked me to sup, saying he should have some persons to meet me who could give me information. On my returning, he introduced me to Madame de Bellonde, and a circle of a dozen ladies, with three or four young officers, leaving the room himself to attend Madame, the princess of something, who was on her flight to Switzerland. I wished the whole company very cordially at a great distance, for I saw, at one glance, what sort of information I should have. There was a little *coterie* in one corner listening to an officer's detail of leaving Paris. This gentleman informed us, that the Count d'Artois, and all the princes of the blood, except Monsieur, and the Duke d'Orleans, the whole connection of Polignac, the Marechal de Broglio, and an infinite number of the first nobility had fled the kingdom, and were daily followed by others; and lastly, that the King, Queen, and royal family, were in a situation at Versailles really dangerous and alarming, without any dependence on the troops near them, and, in fact, more like prisoners than free. Here is, therefore, a revolution effected by a sort of magic; all powers in the realm are destroyed but that of the commons; and it now will remain to see what sort of architects they are at rebuilding an edifice in the place of that which has been thus marvellously tumbled in ruins. Supper being announced, the company quitted the room, and as I did not push myself forward, I remained at the rear till I was very whimsically alone; I was a little struck at the turn of the moment, and did not advance when I found myself in such an extraordinary situation, in order to see whether it would arrive at the point it did. I then, smiling, took my hat, and walked fairly out of the house. I was, however, overtaken below; but I talked of business—or pleasure—or of something, or nothing—and hurried to the inn. I should not have related this, if it had not been at a moment that carried with it its apology: the anxiety and distraction of the time must fill the head, and occupy the attention of a gentleman;—and, as to ladies, what can French ladies think of a man who travels for the plough? —25 miles.

The 26th. For twenty miles to Lisle sur Daube, the country nearly as before; but after that, to Baume les Dames, it is all mountainous and rocky,
much

much wood, and many pleasing scenes of the river flowing beneath. The whole country is in the greatest agitation; at one of the little towns I passed, I was questioned for not having a cockade of the *tiers état*. They said it was ordained by the *tiers*, and, if I were not a Seigneur, I ought to obey. *But suppose I am a Seigneur, what then, my friends?*—What then? they replied sternly, why, be hanged; for that most likely is what you deserve. It was plain this was no moment for joking, the boys and girls began to gather, whose assembling has every where been the preliminaries of mischief; and, if I had not declared myself an Englishman, and ignorant of the ordinance, I had not escaped very well. I immediately bought a cockade, but the hussie pinned it into my hat so loosely, that before I got to Lisle it blew into the river, and I was again in the same danger. My assertion of being English would not do. I was a Seigneur, perhaps in disguise, and without doubt a great rogue. At this moment a priest came into the street with a letter in his hand: the people immediately collected around him, and he then read aloud a detail from Befort, giving an account of M. Necker's passing, with some general features of news from Paris, and assurances that the condition of the people would be improved. When he had finished, he exhorted them to abstain from all violence; and assured them, they must not indulge themselves with any ideas of impositions being abolished; which he touched on as if he knew that they had gotten such notions. When he retired, they again surrounded me, who had attended to the letter like others; were very menacing in their manner; and expressed many suspicions: I did not like my situation at all, especially on hearing one of them say that I ought to be secured till somebody would give an account of me. I was on the steps of the inn, and begged they would permit me a few words; I assured them, that I was an English traveller, and to prove it, I desired to explain to them a circumstance in English taxation, which would be a satisfactory comment on what Monf. l'Abbé had told them, to the purport of which I could not agree. He had asserted, that the impositions must and would be paid as heretofore: that the impositions must be paid was certain, but not as heretofore, as they might be paid as they were in England. "Gentlemen, we have a great number of taxes in England, which you know nothing of in France; but the *tiers état*, the poor do not pay them; they are laid on the rich; every window in a man's house pays; but if he has no more than six windows, he pays nothing; a Seigneur, with a great estate, pays the *vingtiemes* and *tailles*, but the little proprietor of a garden pays nothing; the rich for their horses, their voitures, their servants, and even for liberty to kill their own partridges, but the poor farmer nothing of all this: and what is more, we have in England a tax paid by the rich for the relief of the poor; hence the assertion of Monf. l'Abbé, that because taxes existed before they must exist again, did not at all prove that they

they must be levied in the same manner; our English method seemed much better." There was not a word of this discourse, they did not approve of; they seemed to think that I might be an honest fellow, which I confirmed, by crying, *vive le tiers, sans impositions*, when they gave me a bit of a huzza, and I had no more interruption from them. My miserable French was pretty much on a par with their *patois*. I got, however, another cockade, which I took care to have so fastened as to lose it no more. I do not like travelling in such an unquiet and fermenting moment; one is not secure for an hour beforehand.

—35 miles.

The 27th. To Besançon; the country mountain, rock, and wood, above the river; some scenes are fine. I had not arrived an hour before I saw a peasant pass the inn on horseback, followed by an officer of the *garde bourgeoise*, of which there are 1200 here, and 200 under arms, and his party-coloured detachment, and these by some infantry and cavalry. I asked why the militia took the *pas* of the King's troops? *For a very good reason*, they replied, *the troops would be attacked and knocked on the head, but the populace will not resist the militia*. This peasant, who is a rich proprietor, applied for a guard to protect his house, in a village, where there is much plundering and burning. The mischiefs which have been perpetrated in the country, towards the mountains and Vesoul, are numerous and shocking. Many chateaus have been burnt, others plundered, the seigneurs hunted down like wild beasts, their wives and daughters ravished, their papers and titles burnt, and all their property destroyed: and these abominations not inflicted on marked persons, who were odious for their former conduct or principles, but an indiscriminating blind rage for the love of plunder. Robbers, galley-slaves, and villains of all denominations, have collected and instigated the peasants to commit all sorts of outrages. Some gentlemen at the table d'hôte informed me, that letters were received from the Maconois, the Lyonois, Auvergne, Dauphiné, &c. and that similar commotions and mischiefs were perpetrating every where; and that it was expected they would pervade the whole kingdom. The backwardness of France is beyond credibility in every thing that pertains to intelligence. From Strasbourg hither, I have not been able to see a newspaper. Here I asked for the *Cabinet Littéraire*? None. The gazettes? At the coffee-house. Very easily replied; but not so easily found. Nothing but the *Gazette de France*; for which, at this period, a man of common sense would not give one *sol*. To four other coffee-houses; at some no paper at all, not even the *Mercure*; at the *Caffé Militaire*, the *Courier de l'Europe* a fortnight old; and well dressed people are now talking of the news of two or three weeks past, and plainly by their discourse know nothing of what is passing. The whole town of Besançon has not been able to afford me a sight of the *Journal de Paris*, nor of any paper that gives a detail of the transactions of
the

the states; yet it is the capital of a province, large as half a dozen English counties, and containing 25,000 souls—and, strange to say! the post coming in but three times a week. At this eventful moment, with no licence, nor even the least restraint on the press, not one paper established at Paris for circulation in the provinces, with the necessary steps taken by *affiche*, or *placard*, to inform the people in all the towns of its establishment. For what the country knows to the contrary, their deputies are in the Bastille, instead of the Bastille being razed; so the mob plunder, burn, and destroy, in complete ignorance: and yet, with all these shades of darkness, this universal mass of ignorance, there are men every day in the states, who are puffing themselves off for the FIRST NATION IN EUROPE! the GREATEST PEOPLE IN THE UNIVERSE! as if the political juntas, or literary circles of a capital constituted a people; instead of the universal illumination of knowledge, acting by rapid intelligence on minds prepared by habitual energy of reasoning to receive, combine, and comprehend it. That this dreadful ignorance of the mass of the people, of the events that most intimately concern them, arises from the old government, no one can doubt; it is however curious to remark, that if the nobility of other provinces are hunted like those of Franche Compté, of which there is little reason to doubt, that whole order of men undergo a proscription, and suffer like sheep, without making the least effort to resist the attack. This appears marvellous, with a body that have an army of 150,000 men in their hands; for though a part of those troops would certainly disobey their leaders, yet let it be remembered, that out of the 40,000, or possibly 100,000 noblesse of France, they might, if they had intelligence and union amongst themselves, fill half the ranks of more than half the regiments of the kingdom, with men who have fellow-feelings and fellow-sufferings with themselves; but no meetings, no associations among them; no union with military men; no taking of refuge in the ranks of regiments to defend or avenge their cause; fortunately for France, they fall without a struggle, and die without a blow. That universal circulation of intelligence, which in England transmits the least vibration of feeling or alarm, with electric sensibility, from one end of the kingdom to another, and which unites in bands of connection men of similar interests and situations, has no existence in France. Thus it may be said, perhaps with truth, that the fall of the King, court, lords, nobles, army, church, and parliaments, proceeds from a want of intelligence being quickly circulated, consequently from the very effects of that thralldom in which they held the people: it is therefore a retribution rather than a punishment.—18 miles.

The 28th. At the table d'hôte last night a person gave an account of being stopped at Salins for want of a passport, and suffering the greatest inconveniences; I found it necessary, therefore, to demand one for myself, and went accordingly

to the *Bureau*, but I went in vain: this was an air *veritablement d'un commis*. —These passports are new things from new men, in new power, and shew that they do not bear their new honours too meekly. Thus it is impossible for me, without running my head against a wall, to visit the Salins, or Arbois, where I have a letter from M. de Brouffonet, but I must take my chance and get to Dijon as fast as I can, where the president de Virly knows me, having spent some days at Bradfield, unless indeed being a president and a nobleman, he has been knocked on the head by the *tiers état*. At night to the play; miserable performers; the theatre, which has not been built many years, is heavy; the arch that parts the stage from the house is like the entrance of a cavern, and the line of the amphitheatre, that of a wounded eel; I do not like the air and manners of the people here. The music, and bawling, and squeaking of *l'Epreuve Villageoise* of Gretry, which is wretched, had no power to put me in better humour. I will not take leave of this place, to which I never desire to come again, without saying that they have a fine promenade; and that Mons. Arthaud, the arpenteur, to whom I applied for information without any letter of recommendation, was liberal and polite, and answered my enquiries satisfactorily.

The 29th. To Orechamp the country is bold and rocky, with fine woods, and yet it is not agreeable; it is like many men that have estimable points in their characters, and yet we cannot love them. Poorly cultivated too. Coming out of St. Veté, a pretty riant landskip of the river doubling through the vale, enlivened by a village and some scattered houses: the most pleasing view I have seen in Franche Compté.—23 miles.

The 30th. The mayor of Dole is made of as good stuff as the notary of Besançon; he would give no passport; but as he accompanied his refusal with neither airs nor graces, I let him pass. To avoid the centinels, I went round the town. The country to Auxonne is chearful. Crosses the Soane at Auxonne; it is a fine river, through a region of flat meadow of beautiful verdure; commons for great herds of cattle; vastly flooded, and the hay-cocks under water. To Dijon is a fine country, but wants wood. My passport demanded at the gate: and as I had none, two *bourgeois* musqueteers conducted me to the *hotel de Ville*, where I was questioned, but finding that I was known at Dijon, they let me go to my inn. Out of luck: Mons. de Virly, on whom I most depended for Dijon, is at Bourbon le Bains, and Mons. de Morveau, the celebrated chymist, who I expected would have had letters for me, had none, and though he received me very politely, when I was forced to announce myself as his brother in the Royal Society of London, yet I felt very awkwardly; however, he desired to see me again next morning. They tell me here, that the intendant is fled; and that the Prince of Condé, who is Governor of Burgundy, is in Germany: they positively assert, and with very little ceremony, that they would both be
hanged,

hanged, if they were to come hither at present; such ideas do not mark too much authority in the *milice burgeoise*, as they have been instituted to stop and prevent hanging and plundering. They are too weak, however, to keep the peace: the licence and spirit of depredation, of which I heard so much in crossing Franche Comté, has taken place, but not equally in Burgundy. In this inn, *la Ville de Lyon*, there is at present a gentleman, unfortunately a seigneur, his wife, family, three servants, an infant but a few months old, who escaped from their flaming chateau half naked in the night; all their property lost except the land itself; and this family valued and esteemed by the neighbours, with many virtues to command the love of the poor, and no oppressions to provoke their enmity. Such abominable actions must bring the greater detestation to the cause from being unnecessary; the kingdom might have been settled in a real system of liberty, without the *regeneration* of fire and sword, plunder, and bloodshed. Three hundred *bourgeois* mount guard every day at Dijon, armed, but not paid at the expence of the town: they have also six pieces of cannon. The noblesse of the place, as the only means of safety, have joined them—so that there are croix de St. Louis in the ranks. The *palais des états* here, is a large and splendid building, but not striking proportionably to the mass and expence. The arms of the Prince of Condé are predominant; and the great salon is called the *Salle à manger de Prince*. A Dijon artist has painted the battle of Seniff, and the Grande Condé thrown from his horse, and a ceiling, both well executed. Tomb of the Duke of Bourgogne, 1404. A picture by Rubens at the Chartreuse. They talk of the house of Mons. de Montigny, but not shewn, his sister being in it. Dijon, on the whole, is a handsome town; the streets, though old built, are wide, and very well paved, with the addition, uncommon in France, of *trottoirs*.—28 miles.

The 31st. Waited on Mons. de Morveau, who has, most fortunately for me, received, this morning, from Mons. de Virly, a recommendation of me, with four letters from Mons. de Broussonet; but Mons. Vaudrey, of this place, to whom one of them is addressed, is absent. We had some conversation on the interesting topic to all philosophers, phlogiston; Mons. de Morveau contends vehemently for its non-existence; treats Dr. Priestley's last publication as wide of the question; and declared, that he considers the controversy as much decided as the question of liberty is in France. He shewed me part of the article *air* in the New Encyclopædia by him, to be published soon; in which work, he thinks he has, beyond controversy, established the truth of the doctrine of the French chymists of its non-existence. Mons. de Morveau requested me to call on him in the evening to introduce me to a learned and agreeable lady; and engaged me to dine with him to-morrow. On leaving him, I went to search coffee-houses; but will it be credited, that I could find but one in this capital

of Burgundy, where I could read the newspapers?—At a poor little one in the square, I read a paper, after waiting an hour to get it. The people I have found every where desirous of reading newspapers; but it is rare that they can gratify themselves: and the general ignorance of what is passing may be collected from this, that I found nobody at Dijon had heard of the riot at the town-house of Strasbourg; I described it to a gentleman, and a party collected around me to hear it; not one of them had heard a syllable of it, yet it is nine days since it happened; had it been nineteen, I question whether they would but just have received the intelligence; but, though they are slow in knowing what has really happened, they are very quick in hearing what is impossible to happen. The current report at present, to which all possible credit is given, is, that the Queen has been convicted of a plot to poison the King and Monsieur, and give the regency to the Count d'Artois; to set fire to Paris, and blow up the *Palais Royal* by a mine!—Why do not the several parties in the states cause papers to be printed, that shall transmit their own sentiments and opinions only, in order that no man in the nation, arranged under the same standard of reasoning, may want the facts that are necessary to govern his arguments, and the conclusions that great talents have drawn from those facts? The King has been advised to take several steps of authority against the states, but none of his ministers have advised the establishment of journals, and their speedy circulation, that should undeceive the people in those points his enemies have misrepresented. When numerous papers are published in opposition to each other, the people take pains to sift into and examine the truth; and that inquisitiveness alone—the very act of searching, enlightens them; they become informed, and it is no longer easy to deceive them. At the table d'hôte three only, myself, and two noblemen, driven from their estates, as I conjecture by their conversation, but they did not hint at any thing like their houses being burnt. Their description of the state of that part of the province they come from, in the road from Langres to Gray, is terrible; the number of chateaus burnt not considerable, but three in five plundered, and the possessors driven out of the country, and glad to save their lives. One of these gentlemen is a very sensible well informed man; he considers all rank, and all the rights annexed to rank, as destroyed in fact in France; and that the leaders of the National Assembly having no property, or very little themselves, are determined to attack that also, and attempt an equal division. The expectation is gotten among many of the people; but whether it take place or not, he considers France as *absolutely ruined*. That, I replied, was going too far, for the destruction of rank did not imply *ruin*. “I call nothing ruin,” he replied, “but a general and confirmed civil war, or dismemberment of the kingdom; in my opinion, both are inevitable; not perhaps this year, or the next, or the year after that, but whatever government is built on the foundation now laying

laying in France, cannot stand any rude shocks; an unsuccessful or a successful war will equally destroy it."—He spoke with great knowledge of historical events, and drew his political conclusions with much acumen. I have met with very few such men at tables d'hôtes. It may be believed, I did not forget M. de Morveau's appointment. He was as good as his word; Madame Picardet is as agreeable in conversation as she is learned in the closet; a very pleasing unaffected woman; she has translated Scheele from the German, and a part of Mr. Kirwan from the English; a treasure to M. de Morveau, for she is able and willing to converse with him on chymical subjects, and on any others that tend either to instruct or please. I accompanied them in their evening's promenade. She told me, that her brother, Mons. de Poule, was a great farmer, who had sown large quantities of sainfoin, which he used for fattening oxen; she was sorry he was engaged so closely in the municipal business at present, that he could not attend me to his farm.

AUGUST 1. Dined with Mons. de Morveau by appointment; Mons. Professeur Chaussée, and Mons. Picardet of the party. It was a rich day to me; the great and just reputation of Mons. de Morveau, for being not only the first chymist of France, but one of the greatest that Europe has to boast, was alone sufficient to render his company interesting; but to find such a man void of affectation; free from those airs of superiority which are sometimes found in celebrated characters, and that reserve which oftener throws a veil over their talents, as well as conceals their deficiencies for which it is intended—was very pleasing. Mons. de Morveau is a lively, conversable, eloquent man, who, in any station of life, would be sought as an agreeable companion. Even in this eventful moment of revolution, the conversation turned almost entirely on chymical subjects. I urged him, as I have done Dr. Priestley more than once, and Mons. La Voisier also, to turn his enquiries a little to the application of his science to agriculture; that there was a fine field for experiments in that line, which could scarcely fail of making discoveries; to which he assented; but added, that he had no time for such enquiries: it is clear, from his conversation, that his views are entirely occupied by the non-existence of phlogiston, except a little on the means of establishing and enforcing the new nomenclature. While we were at dinner a proof of the New Encyclopædia was brought him, the chymical part of which work is printed at Dijon, for the convenience of Mons. de Morveau. I took the liberty of telling him, that a man who can devise the experiments which shall be most conclusive in ascertaining the questions of a science, and has talents to draw all the useful conclusions from them, should be entirely employed in experiments, and their register; and if I were King or minister of France, I would make that employment so profitable to him, that he should do nothing else. He laughed, and asked me, if I were such an advocate for working, and such an enemy to writing,

writing, what I thought of my friend Dr. Priestley? And he then explained to the two other gentlemen that great philosopher's attention to metaphysics, and polemic divinity. If an hundred had been at table, the sentiment would have been the same in every bosom. Monf. M. spoke, however, with great regard for the experimental talents of the Doctor, as indeed who in Europe does not?—I afterwards reflected on Monf. de Morveau's not having time to make experiments that should apply chymistry to agriculture, yet having plenty of it for writing in so voluminous a work as Pankouck's. I lay it down as a maxim, that no man can establish or support a reputation in any branch of experimental philosophy, such as shall really descend to posterity, otherwise than by experiment; and that commonly the more a man works, and the less he writes the better, at least the more valuable will be his reputation. The profit of writing has ruined that of many (those who know Mon. de Morveau will be very sure I am far enough from having him in my eye; his situation in life puts it out of the question); that compression of materials, which is luminous; that brevity which appropriates facts to their destined points, are alike inconsistent with the principles that govern all compilations; there are able and respectable men now in every country for compiling; experimenters of genius should range themselves in another class. If I were a sovereign, and capable consequently of rewarding merit, the moment I heard of a man of real genius engaged in such a work, I would give him double the bookseller's price to let it alone, and to employ himself in paths that did not admit a rival at every door. There are who will think that this opinion comes oddly from one who has published so many books as I have; but I hope it will be admitted, to come naturally at least from one who is writing a work from which he does not expect to make one penny, who, therefore, has stronger motives to brevity than temptations to prolixity. The view of this great chymist's laboratory will shew that he is not idle:—it consists of two large rooms, admirably furnished indeed. There are six or seven different furnaces (of which Macquer's is the most powerful), and such a variety and extent of apparatus, as I have seen no where else, with a furniture of specimens from the three kingdoms, as looks truly like business. There are little writing desks, with pens and paper, scattered every where, and in his library also, which is convenient. He has a large course of eudiometrical experiments going on at present, particularly with Fontana's and Volta's eudiometers. He seems to think, that eudiometrical trials are to be depended on: keeps his nitrous air in quart bottles, stopped with common corks, but reversed; and that the air is always the same, if made from the same materials. A very simple and elegant method of ascertaining the proportion of vital air he explained to us, by making the experiment; putting a morsel of phosphorus into a glass retort, confined by water or mercury, and inflaming it, by holding a bougie under it.

it. The diminution of air marks the quantity that was vital on the antiphlogistic doctrine. After one extinction, it will boil, but not enflame. He has a pair of scales made at Paris, which, when loaded with 3000 grains, will turn with the twentieth part of one grain; an air pump, with glass barrels, but one of them broken and repaired; the Count de Buffon's system of burning lens; an absorber; a respirator, with vital air in a jar on one side, and lime-water in another; and abundance of new and most ingenious inventions for facilitating enquiries in the new philosophy of air. These are so various, and at the same time so well contrived to answer the purpose intended, that this species of invention seems to be one very great and essential part of Mons. de Morveau's merit; I wish he would follow Dr. Priestley's idea of *publishing his tools*, it would add not inconsiderably to his great and well earned reputation, and at the same time promote the enquiries he engages in amongst all other experimenters. M. de Morveau had the goodness to accompany me in the afternoon to the Academy of Sciences: they have a very handsome salon, ornamented with the busts of Dijon worthies; of such eminent men as this city has produced, Bossuet—Fevret—De Broffes—De Crebillon—Pyron—Bonhier—Rameau—and lastly, Buffon; and some future traveller will doubtless see here, that of a man inferior to none of these, Mons. de Morveau, by whom I had now the honour of being conducted. In the evening we repaired again to Madame Picardet, and accompanied her promenade: I was pleased, in conversation on the present disturbances of France, to hear Mons. de Morveau remark, that the outrages committed by the peasants arose from their defects of *lumieres*. In Dijon it had been publicly recommended to the *curées* to enlighten them somewhat politically in their sermons, but all in vain, not one would go out of the usual routine of his preaching.—*Quere*, Would not one newspaper enlighten them more than a score of priests? I asked Mons. de Morveau, how far it was true that the chateaus had been plundered and burnt by the peasants alone; or whether by those troops of *brigands*, reported to be formidable? He assured me, that he has made strict enquiries to ascertain this matter, and is of opinion, that all the violences in this province, that have come to his knowledge, have been committed by the peasants only; much has been reported of *brigands*, but nothing proved. At Besançon I heard of 800; but how could a troop of 800 banditti march through a country, and leave their existence the least questionable?—as ridiculous as Mr. Bayes's army *incog*.

The 2d. To Beaune; a range of hills to the right under vines, and a flat plain to the left, all open, and too naked. At the little insignificant town of Nuys, forty men mount guard every day, and a large corps at Beaune. I am provided with a passport from the Mayor of Dijon, and a flaming cockade of the *tiers état*, and therefore hope to avoid difficulties; though the reports of the riots of the peasants are so formidable, that it seems impossible to travel in safety.

Stop

Stop at Nuys for intelligence concerning the vineyards of this country, so famous in France, and indeed in all Europe; and examine the *Clos de Voujaud*, of 100 *journaux*, walled in, and belonging to a convent of Bernardine Monks.—When are we to find these fellows chusing badly*? The spots they appropriate shew what a righteous attention they give to things of the spirit.—22 miles.

The 3d. Going out of Chagnie, where I quitted the great Lyons road, pass by the canal of Chaulais, which goes on very poorly; it is a truly useful undertaking, and therefore left undone; had it been for boring cannon, or coppering men of war, it would have been finished long ago. To Montcenis a disagreeable country; singular in its features. It is the seat of one of Mons. *Weelkainjong's* establishments for casting and boring cannon: I have already described one near Nantes. The French say, that this active Englishman is brother-in-law of Dr. Priestley, and therefore a friend of mankind; and that he taught them to bore cannon, in order to give liberty to America. The establishment is very considerable; there are from 500 to 600 men employed, besides colliers; five steam engines are erected for giving the blasts, and for boring; and a new one building. I conversed with an Englishman who works in the glass-house, in the crystal branch; there were once many, but only two are left at present: he complained of the country, saying there was nothing good in it but wine and brandy; of which things I question not but he makes a sufficient use.—25 miles.

The 4th. By a miserable country most of the way, and through hideous roads to Autun. The first seven or eight miles the agriculture quite contemptible. From thence to Autun all, or nearly all, inclosed, and the first so for many miles. From the hill before Autun an immense view down on that town, and the flat country of the Bourbonnois for a great extent.—View at Autun the temple of Janus—the walls—the cathedral—the abbey. The reports here of *brigands*, and burning and plundering, are as numerous as before; and when it was known in the inn that I came from Burgundy and Franche Compté, I had eight or ten people introducing themselves, in order to ask for news. The rumour of *brigands* here increased to 1600 strong. They were much surprised to find, that I gave no credit to the existence of *brigands*, as I was well persuaded, that all the outrages that had been committed, were the work of the peasants only, for the sake of plundering. This they had no conception of, and quoted a list of chateaus burnt by them; but on analysing these reports, they plainly appeared to be ill founded.—20 miles.

The 5th. The extreme heat of yesterday made me feverish; and this morning I waked with a sore throat. I was inclined to waste a day here for the security of my health; but we are all fools in trifling with the things most

* Sold since by the Assembly for 1,140,600 livres, or 500l. sterl. per journal.

valuable to us. Loss of time, and vain expence, are always in the head of a man who travels as much *en philosophe* as I am forced to do. To Maison de Bourgogne, I thought myself in a new world; the road is not only excellent, of gravel, but the country is inclosed and wooded. There are many gentle inequalities, and several ponds that add to the beauty of the country. The weather, since the commencement of August, has been clear, bright, and burning; too hot to be perfectly agreeable in the middle of the day, but no flies, and therefore I do not regard the heat. This circumstance may, I think, be fixed on as the test. In Languedoc, &c. these heats, as I have experienced, are attended by myriads, and consequently they are tormenting. One had need be sick at this *Maison de Bourgogne*; a healthy stomach would not be easily filled; yet it is the post-house. In the evening to Lusy, another miserable post-house. Note, through all Burgundy the women wear flapped men's hats, which have not nearly so good an effect as the straw ones of Alsace.—22 miles.

The 6th. To escape the heat, out at four in the morning, to Bourbon Lancy, through the same country inclosed, but wretchedly cultivated, and all amazingly improveable. If I had a large tract in this country, I think I should not be long in making a fortune; climate, prices, roads, inclosures, and every advantage, except government. All from Autun to the Loire is a noble field for improvement, not by expensive operations of manuring and draining, but merely by substituting crops adapted to the soil. When I see such a country thus managed, and in the hands of starving *metayers*, instead of fat farmers, I know not how to pity the seigneurs, great as their present sufferings are. I met one of them, to whom I opened my mind:—he pretended to talk of agriculture, finding I attended to it; and assured me, that he had Abbé Roziere's *corps complet*, and he believed, from his accounts, that this country would not do for any thing but rye. I asked him, whether he or Abbé Roziere knew the right end of a plough? He assured me, that the Abbé was *un homme de grand merite, beaucoup d'agriculteur*. Cross the Loire by a ferry; it is here the same nasty scene of shingle, as in Touraine. Enter the Bourbonnois; the same inclosed country, and a beautiful gravel road. At *Chavanne le Roi*, Monf. Joly, the *aubergiste*, informed me of three domains (farms) to be sold, adjoining almost to his house, which is new and well built. I was for appropriating his inn at once in my imagination for a farmhouse, and was working on turnips and clover, when he told me, that if I would walk behind his stable, I might see, at a small distance, two of the houses; he said the price would be about 50 or 60,000 liv. (2,625l.), and would altogether make a noble farm. If I were twenty years younger, I should think seriously of such a speculation; but there again is the folly and deficiency of life; twenty years ago, such a thing would, for want of experience, have been my ruin; and, now I have the experience, I am too old for the undertaking.—27 miles.

The 7th. Moulins appears to be but a poor ill built town. I went to the *Belle Image*, but found it so bad, that I left it, and went to the *Lyon d'Or*, which is worse. This capital of the Bourbonnois, and on the great post road to Italy, has not an inn equal to the little village of Chavanne. To read the papers, I went to the coffee-house of Madame Bourgeau, the best in the town, where I found near twenty tables set for company, but, as to a newspaper, I might have as well have demanded an elephant. Here is a feature of national backwardness, ignorance, stupidity, and poverty! In the capital of a great province, the seat of an intendant, at a moment like the present, with a National Assembly voting a revolution, and not a newspaper to inform the people whether Fayette, Mirabeau, or Louis XVI. were on the throne. Companies at a coffee-house, numerous enough to fill twenty tables, and curiosity not active enough to command one paper. What impudence and folly!—Folly in the customers of such a house not to insist on half a dozen papers, and all the journals of the assembly; and impudence of the woman not to provide them! Could such a people as this ever have made a revolution, or become free? Never, in a thousand centuries: The enlightened mob of Paris, amidst hundreds of papers and publications, have done the whole. I demanded why they had no papers? *They are too dear*; but she made me pay 24s. for one dish of coffee, with milk, and a piece of butter about the size of a walnut. It is a great pity there is not a camp of *brigands* in your coffee-room, Madame Bourgeau.—Among the many letters for which I am indebted to Monsr. Broussonet, few have proved more valuable than one I had for Monsr. l'Abbé de Barut, principal of the college of Moulins, who entered with intelligence and animation into the object of my journey, and took every step that was possible to get me well informed. He carried me to Monsr. le Count de Grimau, lieutenant general of the Balliage, and director of the Society of Agriculture at Moulins, who kept us at dinner. He appears to be a man of considerable fortune, of information, and knowledge, agreeable and polite. He discoursed with me on the state of the Bourbonnois; and assured me, that estates were rather given away than sold: that the *metayers* were so miserably poor, it was impossible for them to cultivate well. I started some observations on the modes which ought to be pursued; but all conversation of that sort is time lost in France. After dinner, M. Grimau carried me to his villa, at a small distance from the town, which is very prettily situated, commanding a view of the vale of the Allier. Letters from Paris, which contain nothing but accounts truly alarming, of the violences committed all over the kingdom, and particularly at and in the neighbourhood of the capital. M. Necker's return, which it was expected would have calmed every thing, has no effect at all; and it is particularly noted in the National Assembly, that there is a violent party evidently bent on driving things to extremity: men who, from the violence and conflicts of the moment,

ment, find themselves in a position, and of an importance that results merely from public confusion, will take effectual care to prevent the settlement, order, and peace, which, if established, would be a mortal blow to their consequence: they mount by the storm, and would sink in a calm. Among other persons to whom Mons. l'Abbé Barut introduced me, was the Marquis de Goutte, *chef d'escadre* of the French fleet, who was taken by Admiral Boscawen at Louisbourg, in 1758, and carried to England, where he learned English, of which he yet retains something. I had mentioned to Mons. l'Abbé Barut, that I had a commission from a person of fortune in England, to look out for a good purchase in France; and knowing that the marquis would sell one of his estates, he mentioned it to him. Mons. de Goutte gave me such a description of it, that I thought, though my time was short, that it would be very well worth bestowing one day to view it, as it was no more than eight miles from Moulins, and, proposing to take me to it the next day in his coach, I readily consented. At the time appointed, I attended the marquis, with M. l'Abbé Barut, to his chateau of Riaux, which is in the midst of the estate he would sell on such terms, that I never was more tempted to speculate: I have very little doubt but that the person who gave me a commission to look out for a purchase, is long since sickened of the scheme, which was that of a residence for pleasure, by the disturbances that have broken out here: so that I should clearly have the refusal of it myself. It would be upon the whole a more beneficial purchase than I had any conception of, and confirms Mons. de Grimau's assertion, that estates here are rather given away than sold. The chateau is large and very well built, containing two good rooms, either of which would hold a company of thirty people, with three smaller ones on the ground floor; on the second ten bedchambers, and over them good garrets, some of which are well fitted up; all sorts of offices substantially erected, and on a plan proportioned to a large family, including barns new built, for holding half the corn of the estate in the straw, and granaries to contain it when threshed. Also a wine press and ample cellaring, for keeping the produce of the vineyards in the most plentiful years. The situation is on the side of an agreeable rising, with views not extensive, but pleasing, and all the country round of the same features I have described, being one of the finest provinces in France. Adjoining the chateau is a field of five or six arpents, well walled in, about half of which is in culture as a garden, and thoroughly planted with all sorts of fruits. There are twelve ponds, through which a small stream runs, sufficient to turn two mills, that let at 1000 liv. (43l. 15s.) a-year. The ponds supply the proprietor's table amply with fine carp, tench, perch, and eels; and yield besides a regular revenue of 1000 liv. There are 20 arpents of vines that yield excellent white and red wine, with *maisons* for the vigneron; woods more than sufficient to supply the chateau

with fuel; and lastly, nine domains or farms let to *metayers*, tenants at will, at half produce, producing, in cash, 10,500 liv. (459l. 7s. 6d.) consequently the gross produce, farms, mills, and fish, is 12,500 liv. The quantity of land, I conjecture from viewing it, as well as from notes taken, may be above 3000 arpents or acres, lying all contiguous and near the chateau. The outgoings for those taxes paid by the landlord; repairs, *garde de chasse*, game-keeper (for here are all the feignural rights, *haute justice*, &c.), steward, expences on wine, &c. amount to about 4400 liv. (192l. 10s.) It yields therefore net something more than 8000 liv. (350l.) a year. The price asked is 300,000 liv. (13,125l.); but for this price is given the furniture complete of the chateau, all the timber, amounting, by valuation of oak only, to 40,000 liv. (1750l.) and all the cattle on the estate, viz. 1000 sheep, 60 cows, 72 oxen, 9 mares, and many hogs. Knowing, as I did, that I could, on the security of this estate, borrow the whole of the purchase-money, I withstood no trifling temptation when I resisted it. The finest climate in France, perhaps in Europe; a beautiful and healthy country; excellent roads; a navigation to Paris; wine, game, fish, and every thing that ever appears on a table, except the produce of the tropics; a good house, a fine garden, ready markets for every sort of produce; and, above all the rest, 3000 acres of inclosed land, capable in a very little time of being, without expence, quadrupled in its produce, altogether formed a picture sufficient to tempt a man who had been five-and-twenty years in the constant practice of the husbandry adapted to this soil. But the state of government—the possibility that the leaders of the Paris democracy might in their wisdom abolish property as well as rank; and that in buying an estate I might be purchasing my share in a civil war—deterred me from engaging at present, and induced me to request only that the marquis would give me the refusal of it, before he sold it to any body else. When I have to treat with a person for a purchase, I shall wish to deal with such an one as the Marquis de Goutte. He has a physiognomy that pleases me; the ease and politeness of his nation is mixed with great probity and honour; and is not rendered less amiable by an appearance of dignity that flows from an ancient and respectable family. To me he seems a man in whom one might, in any transaction, place implicit confidence. I could have spent a month in the Bourbonnois, looking at estates to be sold; adjoining to that of M. de Goutte's is another of 270,000 liv. purchase, Ballain; Mons. l'Abbé Barut having made an appointment with the proprietor, carried me in the afternoon to see the chateau and a part of the lands; all the country is the same soil, and in the same management. It consists of eight farms, stocked with cattle and sheep by the landlord; and here too the ponds yield a regular revenue. Income at present 10,000 liv. (437l. 10s.) a year; price 260,000 liv. (11,375l.) and

10,000 liv. for wood—twenty-five years purchase. Also near St. Poncin another of 400,000 liv. (17,500l.), the woods of which, 450 acres, produce 5000 liv. a year; 80 acres of vines, the wines so good as to be sent to Paris; good land for wheat, and much sown; a modern chateau, *avec toutes les aisances*, &c. And I heard of many others. I conjecture that one of the finest contiguous estates in Europe might at present be laid together in the Bourbonnois. And I am further informed, that there are at present 6000 estates to be sold in France; if things go on as they do at present, it will not be a question of buying estates, but kingdoms, and France itself will be under the hammer. I love a system of policy that inspires such confidence as to give a value to land, and that renders men so comfortable on their estates as to make the sale of them the last of their ideas. Return to Moulins.—30 miles.

The 10th. Took my leave of Moulins, where estates and farming have driven even Maria and the poplar from my head, and left me no room for the tombeau de Montmorenci; having paid extravagantly for the mud walls, cobweb tapestry, and unfavoury scents of the *Lyon d'Or*, I turned my mare towards Chateauneuf, on the road to Auvergne. The accompaniment of the river makes the country pleasant. I found the inn full, busy, and bustling; Monseigneur, the bishop, coming to the fete of St. Laurence, patron of the parish here. Asking for the *commodité*, I was desired to walk into the garden. This has happened twice or thrice to me in France; I did not before find out that they were such good cultivators in this country; I am not well made for dispensing this sort of fertility; but my lord the bishop and thirty fat priests will, after a dinner that has employed all the cooks of the vicinity, doubtless contribute amply to the amelioration of the lettuces and onions of Monf. le Maitre de la Poste. To St. Poncin.—30 miles.

The 11th. Early to Riom, in Auvergne. Near that town the country is interesting; a fine wooded vale to the left, every where bounded by mountains; and those nearer to the right of an interesting outline. Riom, part of which is pretty enough, is all volcanic; it is built of lava from the quarries of Volvic, which are highly curious to a naturalist. The level plain, which I passed in going to Clermont, is the commencement of the famous Limagne of Auvergne, asserted to be the most fertile of all France; but that is an error, I have seen richer land in both Flanders and Normandy. This plain is as level as a still lake; the mountains are all volcanic, and consequently interesting.—Pass a scene of very fine irrigation, that will strike a farming eye, to Mont Ferrand, and after that to Clermont. Riom, Ferrand, and Clermont, are all built, or rather perched, on the tops of rocks. Clermont is in the midst of a most curious country, all volcanic; and is built and paved with lava: much of it forms one of the worst built, dirtiest, and most stinking places I have met with.

with. There are many streets that can, for blackness, dirt, and ill scents, only be represented by narrow channels cut in a night dunghill. The contention of nauseous favours, with which the air is impregnated, when brisk mountain gales do not ventilate these excrementitious lanes, made me envy the nerves of the good people, who, for what I know, may be happy in them. It is the fair, the town full, and the tables d'hôtes crowded.—25 miles.

The 12th. Clermont is partly free from the reproach I threw on Moulins and Besançon, for there is a *salle à lecture* at a Monf. Bovares, a bookseller, where I found several newspapers and journals; but at the coffee-house, I enquired for them in vain:—they tell me also, that the people here are great politicians, and attend the arrival of the courier with impatience. The consequence is, there have been no riots; the most ignorant will always be the readiest for mischief. The great news just arrived from Paris, of the utter abolition of tythes, feudal rights, game, warrens, pigeons, &c. have been received with the greatest joy by the mass of the people, and by all not immediately interested; and some even of the latter approve highly of the declaration: but I have had much conversation with two or three very sensible persons, who complain bitterly of the gross injustice and cruelty of any such declarations of what will be done, but is not effected and regulated at the moment of declaring. Monf. l'Abbe Arbré, to whom Monf. de Brouffonet's letter introduced me, had the goodness not only to give me all the information relative to the curious country around Clermont, which, particularly as a naturalist, attracted his enquiries, but also introduced me to Monf. Chabrol, as a gentleman who has attended much to agriculture, and who answered my enquiries in that line with great readiness.

The 13th. At Roya, near Clermont, a village in the volcanic mountains, which are so curious, and of late years so celebrated, are some springs, reported by philosophical travellers to be the finest and most abundant in France; to view these objects, and more still, a very fine irrigation, said also to be practised there, I engaged a guide. Report, when it speaks of things of which the reporter is ignorant, is sure to magnify; the irrigation is nothing more than a mountain side converted by water to some tolerable meadow, but done coarsely, and not well understood. That in the vale, between Riom and Ferrand, far exceeds it. The springs are curious and powerful: they gush, or rather burst from the rock in four or five streams, each powerful enough to turn a mill, into a cave a little below the village. About half a league higher there are many others; they are indeed so numerous, that scarcely a projection of the rocks or hills is without them. At the village, I found that my guide, instead of knowing the country perfectly, was in reality ignorant; I therefore took a woman to conduct me to the springs higher up the mountain;

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on my return, she was arrested by a soldier of the *garde bourgeoise* (for even this wretched village is not without its national militia) for having, without permission, become the guide of a stranger. She was conducted to a heap of stones, they call the *chateau*. They told me they had nothing to do with me; but as to the woman, she should be taught more prudence for the future: as the poor devil was in jeopardy on my account, I determined at once to accompany them for the chance of getting her cleared, by attesting her innocence. We were followed by a mob of all the village, with the woman's children crying bitterly, for fear their mother should be imprisoned. At the castle, we waited some time, and were then shewn into another apartment, where the town committee was assembled; the accusation was heard; and it was wisely remarked by all, that, in such dangerous times as these, when all the world knew that so great and powerful a person as the Queen was conspiring against France in the most alarming manner, for a woman to become the conductor of a stranger—and of a stranger who had been making so many suspicious enquiries as I had, was a high offence. It was immediately agreed, that she ought to be imprisoned. I assured them she was perfectly innocent; for it was impossible that any guilty motive should be her inducement; finding me curious to see the springs, as I had viewed the lower ones, and wanted a guide for seeing those higher in the mountain, she offered herself: and could have no other than the industrious view of getting a few *sols* for her poor family. They then turned their enquiries against me, that if I wanted to see springs only, what induced me to ask a multitude of questions concerning the price, value, and product of the lands? What had such enquiries to do with springs and volcanoes? I told them, that cultivating some land in England, rendered such things interesting to me personally: and lastly, that if they would send to Clermont, they might know, from several respectable persons, the truth of all I asserted; and therefore I hoped, as it was the woman's first indiscretion, for I could not call it offence, they would dismiss her. This was refused at first, but assented to at last, on my declaring, that if they imprisoned her, they should do the same by me, and answer it as they could. They consented to let her go, with a reprimand, and I departed; *not* marvelling, for I have done with that, at their ignorance, in imagining that the Queen should conspire so dangerously against their rocks and mountains. I found my guide in the midst of the mob, who had been very busy in putting as many questions about me, as I had done about their crops.—There were two opinions; one party thought I was a *commissaire*, come to ascertain the damage done by the hail: the other, that I was an agent of the Queen's, who intended to blow the town up with a mine, and send all that escaped to the gallies. The care that must have been taken to render the character of that princess detested among the people, is incredible; and there seem every where

to be no absurdities too gross, nor circumstances too impossible for their faith. In the evening to the theatre, the *Optimist* well acted. Before I leave Clermont, I must remark, that I dined, or supped, five times at the table d'hôte, with from twenty to thirty merchants and tradesmen, officers, &c. ; and it is not easy for me to express the insignificance,—the inanity of the conversation. Scarcely any politics, at a moment when every bosom ought to beat with none but political sensations. The ignorance or the stupidity of these people must be absolutely incredible; not a week passes without their country abounding with events that are analyzed and debated by the carpenters and blacksmiths of England. The abolition of tythes, the destruction of the *gabelle*, game made property, and feudal rights destroyed, are French topics, that are translated into English within six days after they happen, and their consequences, combinations, results, and modifications, become the disquisition and entertainment of the grocers, chandlers, drapers, and shoemakers of all the towns of England; yet the same people in France do not think them worth their conversation, except in private. Why? because conversation in private wants little knowledge; but in public it demands more; and therefore I suppose, for I confess there are a thousand difficulties attending the solution, they are silent. But how many people, and how many subjects, on which volubility is proportioned to ignorance? Account for the fact as you please, but with me it admits no doubt.

The 14th. To Izoire, the country all interesting, from the number of conic mountains that rise in every quarter; some are crowned with towns;—on others are Roman castles, and the knowledge that the whole is the work of subterranean fire, though in ages far too remote for any record to announce, keeps the attention perpetually alive. Mons. de l'Arbre had given me a letter to Mons. Brés, doctor of physic, at Izoire: I found him, with all the townsmen, collected at the *hotel de ville*, to hear a newspaper read. He conducted me to the upper end of the room, and seated me by himself: the subject of the paper was the suppression of the religious houses, and the commutation of tythes. I observed that the auditors, among whom were some of the lower class, were very attentive; and the whole company seemed well pleased with whatever concerned the tythes and the monks. Mons. Brés, who is a sensible and intelligent gentleman, walked with me to his farm, about half a league from the town, on a soil of superior richness; like all other farms, this is in the hands of a *metayer*. Supped at his house afterwards, in an agreeable company, with much animated political conversation. We discussed the news of the day; they were inclined to approve of it very warmly; but I contended, that the National Assembly did not proceed on any regular well digested system: that they seemed to have a rage for pulling down, but no taste for rebuilding: that if they proceeded much further on such a plan, destroying every thing, but
establishing

establiſhing nothing, they would at laſt bring the kingdom into ſuch confuſion, that they would even themſelves be without power to reſtore it to peace and order; and that ſuch a ſituation would, in its nature, be on the brink of the precipice of bankruptcy and civil war.—I ventured further, to declare it as my idea, that without an upper houſe, they never could have either a good or a durable conſtitution. We had a difference of opinion on theſe points; but I was glad to find, that there could be a fair diſcuſſion,—and that, in a company of fix or ſeven gentlemen, two would venture to agree with a ſyſtem ſo unfashionable as mine.—17 miles.

The 15th. The country continues intereſting to Brioud. On the tops of the mountains of Auvergne are many old caſtles, and towns, and villages. Paſs the river, by a bridge of one great arch, to the village of Lampdes. At that place, wait on Monſ. Greyffier de Talairat, *avocat* and *ſubdelegué*, to whom I had a letter; and who was ſo obliging as to anſwer, with attention, all my enquiries into the agriculture of the neighbourhood. He enquired much after lord Briſtol; and was not the worſe pleaſed with me, when he heard that I came from the ſame province in England. We drank his Lordſhip's health, in the ſtrong white wine, kept four years in the fun, which lord Briſtol had much commended.—18 miles.

The 16th. Early in the morning, to avoid the heat, which has rather incommoded me, to Fix. Croſs the river by a ford, near the ſpot where a bridge is building, and mount gradually into a country, which continues intereſting to a naturaliſt, from its volcanic origin; for all has been either overturned, or formed by fire. Paſs Chomet; and, deſcending, remark a heap of baſaltic columns by the road, to the right; they are ſmall, but regular ſexagons. Poulaget appears in the plain to the left. Stopped at St. George, where I procured mules, and a guide, to ſee the baſaltic columns at Chilliſiac, which, however, are hardly ſtriking enough to reward the trouble. At Fix, I ſaw a field of fine clover; a ſight that I have not been regaled with, I think, ſince Alſace. I deſired to know to whom it belonged? to Monſ. Coſſier, doctor of medicine. I went to his houſe to make enquiries, which he was obliging enough to gratify, and indulged me in a walk over the principal part of his farm. He gave me a bottle of excellent *vin blanc mouſſeux*, made in Auvergne. I enquired of him the means of going to the mine of antimony, four leagues from hence; but he ſaid the country was ſo *enragé* in that part, and had lately been ſo miſchievous, that he adviſed me by all means to give up the project. This country, from climate, as well as pines, muſt be very high. I have been for three days paſt melted with heat; but to-day, though the ſun is bright, the heat has been quite moderate, like an Engliſh ſummer's day, and I am aſſured that they never have it hotter; but complain of the winter's

cold being very severe,—and that the snow in the last was sixteen inches deep on the level. The interesting circumstance of the whole is the volcanic origin: all buildings and walls are of lava: the roads are mended with lava, pozzolana, and basalt; and the face of the country every where exhibits the origin in subterranean fire. The fertility, however, is not apparent, without reflection. The crops are not extraordinary, and many bad; but then the height is to be considered. In no other country that I have seen are such great mountains as these, cultivated so high; here corn is seen every where, even to their tops, at heights where it is usual to find rock, wood, or ling (*ericà vulgaris*)—42 miles.

The 17th. The whole range of the fifteen miles to Le Puy en Velay, is wonderfully interesting. Nature, in the production of this country, such as we see it at present, must have proceeded by means not common elsewhere. It is all in its form tempestuous as the billowy ocean. Mountain rises beyond mountain, with endless variety: not dark and dreary, like those of equal height in other countries, but spread with cultivation (feeble indeed) to the very tops. Some vales sunk among them, of beautiful verdure, please the eye. Towards Le Puy the scenery is still more striking, from the addition of some of the most singular rocks any where to be seen. The castle of Polignac, from which the duke takes his title, is built on a bold and enormous one; it is almost of a cubical form, and towers perpendicularly above the town, which surrounds it at its foot. The family of Polignac claim an origin of great antiquity; they have pretensions that go back, I forget whether to Hector or Achilles; but I never found any one in conversation inclined to allow them more than being in the first class of French families, which they undoubtedly are. Perhaps there is no where to be met with a castle more formed to give a *local* pride of family than this of Polignac: the man hardly exists that would not feel a certain vanity, at having given his own name, from remote antiquity, to so singular and so commanding a rock; but if, with the name, it belonged to me, I would scarcely sell it for a province. The building is of such antiquity, and the situation so romantic, that all the feudal ages pass in review in one's imagination, by a sort of magic influence; you recognize it for the residence of a lordly baron, who, in an age more distant and more respectable, though perhaps equally barbarous, was the patriot defender of his country against the invasion and tyranny of Rome. In every age, since the horrible combustions of nature which produced it, such a spot would be chosen for security and defence. To have given one's name to a castle, without any lofty pre-eminence or singularity of nature, in the midst, for instance, of a rich plain, is not equally flattering to our feelings: all antiquity of family is derived from ages of great barbarism, when civil commotions and wars swept away and confounded the inhabitants of
such

such situations. The Bretons of the plains of England were driven to Bretagne; but the same people, in the mountains of Wales, stuck secure, and remain there to this day. About a gun-shot from Polignac is another rock, not so large, but equally remarkable; and in the town of Le Puy, another commanding one rises to a vast height; with another more singular for its tower-like form—on the top of which St. Michael's church is built. Gypsum and lime-stone abound; and the whole country is volcanic; the very meadows are on lava: every thing, in a word, is either the product of fire, or has been disturbed or tossed about by it. At Le Puy, fair day, and a table d'hôte, with ignorance, as usual. Many coffee-houses, and even considerable ones, but not a single newspaper to be found in any.—15 miles.

The 18th. Leaving Puy, the hill which the road mounts on the way to Costerous, for four or five miles, commands a view of the town far more picturesque than that of Clermont. The mountain, covered with its conical town, crowned by a vast rock, with those of St. Michael and of Polignac, form a most singular scene. The road is a noble one, formed of lava and pozzolana. The adjacent declivities have a strong disposition to run into basaltic pentagons and sexagons; the stones put up in the road, by way of posts, are parts of basaltic columns. The inn at Pradelles, kept by three sisters, Pichots, is one of the worst I have met with in France. Contraction, poverty, dirt, and darkness.—20 miles.

The 19th. To Thuytz; pine woods abound; there are saw-mills, and with ratchet wheels to bring the tree to the saw, without the constant attention of a man, as in the Pyrenees; a great improvement. Pass by a new and beautiful road, along the side of immense mountains of granite; chestnut trees spread in every quarter, and cover with luxuriance of vegetation rocks apparently so naked, that earth seems a stranger. This beautiful tree is known to delight in volcanic soils and situations: many are very large; I measured one fifteen feet in circumference, at five from the ground; and many are nine to ten feet, and fifty to sixty high. At Maiffe the fine road ends, and then a rocky, almost natural one for some miles; but for half a mile before Thuytz recover the new one again, which is here equal to the finest to be seen, formed of volcanic materials, forty feet broad, without the least stone, a firm and naturally level cemented surface. They tell me that 1800 toises of it, or about $2\frac{1}{2}$ miles, cost 180,000 liv. (8250l.) It conducts, according to custom, to a miserable inn, but with a large stable; and in every respect Monsieur Grenadier excels the Demoiselles Pichots. Here mulberries first appear, and with them flies; for this is the first day I have been incommoded. At Thuytz I had an object which I supposed would demand a whole day: it is within four hours ride of the *Montagne de la coup au Colet d'Aisa*, of which M. Faujas de St. Fond has given a plate, in his

Recherches sur les volcans éteints, that shews it to be a remarkable object: I began to make enquiries, and arrangements for having a mule and a guide to go thither the next morning; the man and his wife attended me at dinner, and did not seem, from the difficulties they raised at every moment, to approve my plan: having asked them some questions about the price of provisions, and other things, I suppose they regarded me with suspicious eyes, and thought that I had no good intentions. I desired, however, to have the mule—some difficulties were made—I must have two mules—Very well, get me two. Then returning, a man was not to be had; with fresh expressions of surprise, that I should be eager to see mountains that did not concern me. After raising fresh difficulties to every thing I said, they at last plainly told me, that I should neither have mule nor man; and this with an air that evidently made the case hopeless. About an hour after, I received a polite message from the Marquis Deblou, seigneur of the parish, who hearing that an inquisitive Englishman was at the inn, enquiring after volcanoes, proposed the pleasure of taking a walk with me. I accepted the offer with alacrity, and going directly towards his house met him on the road. I explained to him my motives and my difficulties; he said, the people had gotten some absurd suspicions of me from my questions, and that the present time was so dangerous and critical to all travellers, that he would advise me by no means to think of any such excursions from the great road, unless I found much readiness in the people to conduct me: that at any other moment than the present, he should be happy to do it himself, but that at present it was impossible for any person to be too cautious. There was no resisting this reasoning, and yet to lose the most curious volcanic remains in the country, for the crater of the mountain is as distinct in the print of *Monf. de St. Fond*, as if the lava were now running from it, was a mortifying circumstance. The marquis then shewed me his garden and his chateau, amidst the mountains; behind it is that of *Gravene*, which is an extinguished volcano likewise, but the crater not discernible without difficulty. In conversation with him and another gentleman, on agriculture, particularly the produce of mulberries, they mentioned a small piece of land that produced, by silk only, 120 liv. (5l. 5s.) a year, and being contiguous to the road we walked to it. Appearing very small for such a produce, I stepped it to ascertain the contents, and minuted them in my pocket-book. Soon after, growing dark, I took my leave of the gentlemen, and retired to my inn. What I had done had more witnesses than I dreamt of; for at eleven o'clock at night, a full hour after I had been asleep, the commander of a file of twenty *milice bourgeoise*, with their musquets, or swords, or sabres, or pikes, entered my chamber, surrounded my bed, and demanded my passport. A dialogue ensued, too long to minute; I was forced first to give them my passport, and, that not satisfying them, my papers. They told me that

that I was undoubtedly a conspirator with the Queen, the Count d'Artois, and the Count d'Entraques (who has property here), who had employed me as an *arpenteur*, to measure their fields, in order to double their taxes. My papers being in English saved me. They had taken it into their heads that I was not an Englishman—only a pretended one; for they speak such a jargon themselves, that their ears were not good enough to discover by my language that I was an undoubted foreigner. Their finding no maps, or plans, nor any thing that they could convert by supposition to a *cadaastre* of their parish, had its effect, as I could see by their manner, for they conversed entirely in Patois. Perceiving, however, that they were not satisfied, and talked much of the Count d'Entraques, I opened a bundle of letters that were sealed—these, gentlemen, are my letters of recommendation to various cities of France and Italy, open which you please, and you will find, for they are written in French, that I am an honest Englishman, and not the rogue you take me for. On this they held a fresh consultation and debate, which ended in my favour; they refused to open the letters, prepared to leave me, saying, that my numerous questions about lands, and measuring a field, while I pretended to come after volcanoes, had raised great suspicions, which they observed were natural at a time when it was known to a certainty that the Queen, the Count d'Artois, and the Count d'Entraques were in a conspiracy against the Vivarais. And thus, to my entire satisfaction, they wished me good night, and left me to the bugs, which swarmed in the bed like flies in a honey-pot. I had a narrow escape—it would have been a delicate situation to have been kept prisoner probably in some common goal, or, if not, guarded at my own expence, while they sent a courier to Paris for orders.—20 miles.

The 20th. The same imposing mountainous features continue to Villeneuve de Berg. The road, for half a mile, leads under an immense mass of basaltic lava, run into configurations of various forms, and resting on regular columns; this vast range bulges in the centre into a sort of promontory. The height, form, and figures, and the decisive volcanic character the whole mass has taken, render it a most interesting spectacle to the learned and unlearned eye. Just before Aubenas, mistaking the road, which is not half finished, I had to turn; it was on the slope of the declivity, and very rare that any wall or defence is found against the precipices. My French mare has an ill talent of backing too freely when she begins: unfortunately she exercised it at a moment of imminent danger, and backed the chaise, me, and herself down the precipice; by great good luck, there was at the spot a sort of shelf of rock, that made the immediate fall not more than five feet direct. I leaped out of the chaise in the moment, and fell unhurt: the chaise was overthrown and the mare on her side, entangled in the harness, which kept the carriage from tumbling down a precipice.

pice of sixty feet. Fortunately she lay quietly, for had she struggled both must have fallen. I called some lime-burners to my assistance, who were with great difficulty brought to submit to directions, and not each pursue his own idea to the certain precipitation of both mare and chaise. We extricated her unhurt, secured the chaise, and then, with still greater difficulty, regained the road with both. This was by far the narrowest escape I have had. A blessed country for a broken limb—confinement for six weeks or two months at the *Cheval Blanc*, at Aubenas, an inn that would have been purgatory itself to one of my hogs:—alone—without relation, friend, or servant, and not one person in sixty that speaks French.—Thanks to the good providence that preserved me! What a situation—I shudder at the reflection more than I did falling into the jaws of the precipice. Before I got from the place there were seven men about me, I gave them a 3 liv. piece to drink, which for some time they refused to accept, thinking, with unaffected modesty, that it was too much. At Aubenas repaired the harness, and, leaving that place, viewed the silk mills, which are considerable. Reach Villeneuve de Berg. I was immediately hunted out by the *milice bourgeoise*. *Where is your certificate?* Here again the old objection that my features and person were not described.—*Your papers?* The importance of the case, they said, was great: and they looked as big as if a marshal's baton was in hand. They tormented me with an hundred questions; and then pronounced that I was a suspicious looking person. They could not conceive why a Suffolk farmer could travel into the Vivarais. Never had they heard of any person travelling for agriculture! They would take my passport to the *hotel de ville*—have the permanent council assembled—and place a centinel at my door. I told them they might do what they pleased, provided they did not prohibit my dinner, as I was hungry; they then departed. In about half an hour a gentleman-like man, a *Croix de St. Louis* came, asked me some questions very politely, and seemed not to conclude that Maria Antonietta and Arthur Young were at this moment in any very dangerous conspiracy. He retired, saying, he hoped I should not meet with any difficulties. In another half hour a soldier came to conduct me to the *hotel de ville*; where I found the council assembled; a good many questions were asked; and some expressions of surprise that an English farmer should travel so far for agriculture—they had never heard of such a thing;—but all was in a polite liberal manner; and though travelling for agriculture was as new to them, as if it had been like the antient philosopher's tour of the world on a cow's back, and living on the milk—yet they did not deem any thing in my recital improbable, signed my passport very readily, assured me of every assistance and civility I might want, and dismissed me with the politeness of gentlemen. I described my treatment at Thuytz, which they loudly condemned. I took this opportunity to beg to know where that Pradel was to be found in
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this country, of which Oliver de Serres was seigneur, the well known French writer on agriculture in the reign of Henry IV. They at once pointed out of the window of the room we were in to the house, which in Villex neuve de Berg belonged to him, and informed me that Pradel was within a league. As this was an object I had noted before I came to France, the information gave me no slight satisfaction. The mayor, in the course of the examination, presented me to a gentleman who had translated Sterne into French, but who did not speak English: on my return to the auberge I found that this was Mons. de Boissiere, *avocat general* of the parliament of Grenoble. I did not care to leave the place without knowing something more of one who had distinguished himself by his attention to English literature; and I wrote to him a note, begging permission to have the pleasure of some conversation with a gentleman who had made our inimitable author speak the language of a people he loved so well. Mons. de Boissiere came to me immediately, conducted me to his house, introduced me to his lady and some friends, and as I was much interested concerning Oliver de Serres, he offered to take a walk with me to Pradel. It may easily be supposed that this was too much to my mind to be refused, and few evenings have been more agreeably spent. I regarded the residence of the great parent of French agriculture, and who was undoubtedly one of the first writers on the subject that had then appeared in the world, with that sort of veneration, which those only can feel who have addicted themselves strongly to some predominant pursuit, and find it in such moments indulged in its most exquisite feelings. Two hundred years after his exertions, let me do honour to his memory, he was an excellent farmer and a true patriot, and would not have been fixed on by Henry IV. as his chief agent in the great project of introducing the culture of silk in France, if he had not possessed a considerable reputation; a reputation well earned, since posterity has confirmed it. The period of his practice is too remote to gain any thing more than a general outline of what may now be supposed to have been his farm. The basis of it is limestone; there is a great oak wood near the chateau, and many vines, with plenty of mulberries, some apparently old enough to have been planted by the hand of the venerable genius that has rendered the ground classic. The estate of Pradel, which is about 5000 liv. (218l. 15s.) a year, belongs at present to the Marquis of Mirabel, who inherits it in right of his wife, as the descendant of De Serres. I hope it is exempted for ever from all taxes; he whose writings laid the foundation for the improvement of a kingdom, should leave to his posterity some marks of his countrymen's gratitude. When the present Bishop of Sisteron was shewn, like me, the farm of De Serres, he remarked, that the nation ought to erect a statue to his memory. The sentiment is not without merit, though no more than common snuff-box chat; but if this bishop has a well cultivated farm in his hands it does him honour.

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Supped with Monf. and Madame de Boiffiere, &c. and had the pleasure of an agreeable and interesting conversation.—21 miles.

The 21st. Monf. de Boiffiere, wishing to have my advice in the improvement of a farm, which he has taken into his hands, six or seven miles from Berg, in my road to Viviers, accompanied me thither. I advised him to form one well executed and well improved inclosure every year—to finish as he advances, and to do well what he attempts to do at all; and I cautioned him against the common abuse of that excellent husbandry, paring and burning. I suspect, however, that his *homme d'affaire* will be too potent for the English traveller.—I hope he has received the turnip-feed I sent him.—Dine at Viviers, and pass the Rhone. After the wretched inns of the Vivarais, dirt, filth, bugs, and starving, to arrive at the *hotel de Monsieur*, at Montilimart, a great and excellent inn, was something like the arrival in France from Spain: the contrast is striking; and I seemed to hug myself, that I was again in a christian country among the Milors Ninchitreas, and my Ladi Bettis, of Monf. Chabot.—23 miles.

The 22d. Having a letter to Monf. Faujas de St. Fond, the celebrated naturalist, who has favoured the world with many important works on volcanoes, aërostation, and various other branches of natural history, I had the satisfaction, on enquiring, to find that he was at Montilimart; and, waiting on him, perceived that a man of distinguished merit was handsomely lodged, with every thing about him that indicated an easy fortune. He received me with the frank politeness inherent in his character; introduced me, on the spot, to a Monf. l'Abbé Berenger, who resided near his country-seat, and was, he said, an excellent cultivator; and likewise to another gentleman, whose taste had taken the same good direction. In the evening Monf. Faujas took me to call on a female friend, who was engaged in the same enquiries, Madame Cheinet, whose husband is a member of the National Assembly; if he have the good luck to find at Versailles some other lady as agreeable as her he has left at Montilimart, his mission will not be a barren one; and he may perhaps be better employed than in voting regenerations. This lady accompanied us in a walk for viewing the environs of Montilimart; and it gave me no small pleasure to find, that she was an excellent farmeress, practises considerably, and had the goodness to answer many of my enquiries, particularly in the culture of silk. I was so charmed with the *naïveté* of character, and pleasing conversation of this very agreeable lady, that a longer stay here would have been delicious—but the plough!

The 23d. By appointment, accompanied Monf. Faujas to his country-seat and farm at l'Oriol, fifteen miles north of Montilimart, where he is building a good house. I was pleased to find his farm amount to 280 septérés of land: I should

should have liked it better, had it not been in the hands of a *metayer*. Monf. Faujas pleases me much; the liveliness, vivacity, *phlogiston* of his character, do not run into pertness, foppery, or affectation; he adheres steadily to a subject; and shews, that to clear up any dubious point, by the attrition of different ideas in conversation, gives him pleasure; not through a vain fluency of colloquial powers, but for better understanding a subject. Monf. Abbé Berenger, and another gentleman, passed the next day at Monf. Faujas': we walked to the Abbé's farm. He is of the good order of beings, and pleases me much; *curé* of the parish, and president of the permanent council. He is at present warm on a project of re-uniting the protestants to the church; spoke, with great pleasure, of having persuaded them, on occasion of the general thanksgiving for the establishment of liberty, to return thanks to God, and sing the *Te Deum* in the catholic church, in common as brethren, which, from confidence in his character, they did. He is firmly persuaded, that, by both parties giving way a little, and softening or retrenching reciprocally somewhat in points that are disagreeable, they may be brought together. The idea is so liberal, that I question it for the multitude, who are never governed by reason, but by trifles and ceremonies,—and who are usually attached to their religion, in proportion to the absurdities it abounds with. I have not the least doubt but the mob in England would be much more scandalized at parting with the creed of St. Athanasius, than the whole bench of bishops, whose illumination would perhaps reflect correctly that of the throne. Monf. l'Abbé Berenger has prepared a memorial, which is ready to be presented to the National Assembly, proposing and explaining this ideal union of the two religions; and he had the plan of adding a clause, proposing that the clergy should have permission to marry. He was convinced, that it would be for the interest of morals, and much for that of the nation, that the clergy should not be an insulated body, but holding by the same interests and connections as other people. He remarked, that the life of a *curé*, and especially in the country, is melancholy; and, knowing my passion, observed, that a man could never be so good a farmer, on any possession he might have, excluded from being succeeded by his children. He shewed me his memoir, and I was pleased to find that there is at present great harmony between the two religions, which must be ascribed certainly to such good *curés*. The number of protestants is very considerable in this neighbourhood. I strenuously contended for the insertion of the clause respecting marriage; assured him, that at such a moment as this, it would do all who were concerned in this memorial the greatest credit; and that they ought to consider it as a demand of the rights of humanity, violently, injuriously, and, relative to the nation, impolitically withheld. Yesterday, in going with Monf. Faujas, we passed a congregation of protestants assembled, Druid-like, under five or six spreading oaks, to offer

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their thanksgiving to the great Parent of their happiness and hope.—In such a climate as this, is it not a worthier temple, built by the great hand they revere, than one of brick and mortar?—This was one of the richest days I have enjoyed in France; we had a long and truly farming dinner; drank a l'Anglois success to THE PLOUGH? and had so much agricultural conversation, that I wished for my farming friends in Suffolk to partake of my satisfaction. If Monf. Faujas de St. Fond come to England, as he gives me hopes, I shall introduce him to them with pleasure. In the evening return to Montilimart.—30 miles.

The 25th. To Chateau Rochemaur, across the Rhone. It is situated on a basaltic rock, nearly perpendicular, with every columnal proof of its volcanic origin. See Monf. Faujas' *Recherches*. In the afternoon to Piere Latte, through a country steril, uninteresting, and far inferior to the environs of Montilimart.—22 miles.

The 26th. To Orange, the country not much better; a range of mountains to the left: see nothing of the Rhone. At that town there are remains of a large Roman building, seventy or eighty feet high, called a circus, of a triumphal arch, which, though a good deal decayed, manifests, in its remains, no ordinary decoration, and a pavement in the house of a poor person, which is very perfect and beautiful, but much inferior to that of Nismes. The *vent de bise* has blown strongly for several days, with a clear sky, tempering the heats, which are sometimes sultry and oppressive; it may, for what I know, be wholesome to French constitutions, but it is dreadful to mine; I found myself very indifferent, and, as if I were going to be ill, a new and unusual sensation over my whole body: never dreaming of the wind, I knew not what to attribute it to, but my complaint coming at the same time, puts it out of doubt; besides, instinct now, much more than reason, makes me guard as much as I can against it. At four or five in the morning it is so cold that no traveller ventures out. It is more penetratingly drying than I had any conception of; other winds stop the cutaneous perspiration; but this piercing through the body seems, by its sensation, to dry up all the interior humidity.—20 miles.

The 27th. To Avignon.—Whether it were because I had read much of this town in the history of the middle ages, or because it had been the residence of the Popes, or more probably from the still more interesting memoirs which Petrarch has left concerning it, in poems that will last as long as Italian elegance and human feelings shall exist, I know not—but I approached the place with a sort of interest, attention, and expectancy, that few towns have kindled. Laura's tomb is in the church of the Cordeliers; it is nothing but a stone in the pavement, with a figure engraven on it partly effaced, surrounded by an inscription in Gothic letters, and another in the wall adjoining, with the armorial of the family of Sade. How incredible is the power of great talents, when employed

employed in delineating passions common to the human race! How many millions of women, fair as Laura, have been beloved as tenderly—but, wanting a Petrarch to illustrate the passion, have lived and died in oblivion! whilst his lines, not written to die, conduct thousands under the impulse of feelings, which genius only can excite, to mingle in idea their melancholy sighs with those of the poet who consecrated these remains to immortality!—There is a monument of the brave Crillon in the same church; and I saw other churches and pictures—but Petrarch and Laura are predominant at Avignon.—19 miles.

The 28th. Wait upon Pere Brouillon, provincial visitor, who, with great politeness, procured me the information I wished, by introducing me to some gentlemen conversant in agriculture. From the rock of the legate's palace, there is one of the finest views of the windings of the Rhone that is to be seen: it forms two considerable islands, which, with the rest of the plain, richly watered, cultivated, and covered with mulberries, olives, and fruit-trees, hath an interesting boundary in the mountains of Provence, Dauphiné and Languedoc.—The circular road fine. I was struck with the resemblance between the women here and in England. It did not at once occur in what it consisted; but it is their caps; they dress their heads quite different from the French women. A better particularity, is there being no wooden shoes here, nor, as I have seen, in Provence*. I have often complained of the stupid ignorance I met with at tables d'hôtes. Here, if possible, it has been worse than common. The politeness of the French is proverbial, but it never could arise from the manners of the classes that frequent these tables. Not one time in forty will a foreigner, as such, receive the least mark of attention. The only political idea here is, that if the English should attack France, they have a million of men in arms to receive them; and their ignorance seems to know no distinction between men in arms in their towns and villages, or in action without the kingdom. They conceive, as Sterne observes, much better than they combine: I put some questions to them, but in vain: I asked, if the union of a rusty firelock and a *bourgeois* made a soldier?—I asked them in which of their wars they had wanted men? I demanded, whether they had ever felt any other want than that of money? And whether the conversion of a million of men into the bearers of muskets would make money more plentiful? I asked if personal service were not a tax? And whether paying the tax of the service of a million of men increased their

* We were, like you, struck with the resemblance of the women at Avignon to those of England, but not for the reason you give; it appeared to us to originate from their complexions being *naturally* so much better than that of the other French women, more than their head-dress, which differs as much from ours as it does from the French. *Note by a female friend.*

faculties of paying other and more useful taxes? I begged them to inform me, if the regeneration of the kingdom, which had put arms in the hands of a million of mob, had rendered industry more productive, internal peace more secure, confidence more enlarged, or credit more stable? And lastly, I assured them, that should the English attack them at present, they would probably make the weakest figure they had done from the foundation of their monarchy: but, gentlemen, the English, in spite of the example you set them in the American war, will disdain such a conduct; they regret the constitution you are forming, because they think it a bad one—but whatever you may establish, you will have no interruption, but many good wishes from your neighbour. It was all in vain; they were well persuaded their government was the best in the world; that it was a monarchy, and no republic, for which I contended; and that the English thought so too, because they would unquestionably abolish their house of lords, in the enjoyment of which accurate idea I left them.—In the evening to Lille, a town which has lost its name in the world, in the more splendid fame of Vacluse. There can hardly be met with a richer, or better cultivated tract of sixteen miles; the irrigation is superb. Lille is most agreeably situated. On coming to the verge of it I found fine plantations of elms, with delicious streams, bubbling over pebbles on either side; well dressed people were enjoying the evening at a spot, which I had conceived to be only a mountainous village. It was a sort of fairy scene to me. Now, thought I, how detestable to leave all this fine wood and water, and enter a nasty, beggarly, walled, hot, stinking town, one of the contrasts most offensive to my feelings? What an agreeable surprise, to find the inn without the town, in the midst of the scenery I had admired! and more so, as it was cheap, and the accommodations good. I walked on the banks of this classic stream for an hour, with the moon gazing on the waters, that will run for ever in mellifluous poetry: retired to sup on the most exquisite trout and craw fish in the world. To-morrow to the famed origin.—16 miles.

The 29th. I am delighted with the environs of Lille; beautiful roads, well planted, surround and pass off in different directions, as if from a capital town, umbrageous enough to form promenades against a hot sun, and the river is divided into so many streams, and conducted with so much attention, that it has a delicious effect, especially to an eye that recognises all the fertility of irrigation. To the fountain of Vacluse, which is justly said to be as celebrated almost as that of Helicon. Crossing a plain, which is not so beautiful as one's idea of Tempe; the mountain presents an almost perpendicular rock, at the foot of which is an immense and very fine cavern, half filled with a pool of stagnant, but clear water; this is the famous fountain; at other seasons it fills the whole cavern, and boils over in a vast stream among rocks; its bed now marked
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by vegetation. At present the water gushes out 200 yards lower down, from beneath masses of rock, and in a very small distance forms a considerable river, which almost immediately receives deviations by art for mills and irrigation. On the summit of a rock above the village, but much below the mountain, is a ruin, called, by the poor people here, the chateau of Petrarch—who tell you it was inhabited by Monf. Petrarch and Madame Laura. The scene is sublime; but what renders it truly interesting to our feelings, is the celebrity which great talents have given it. The power of rocks, and water; and mountains, even in their boldest features, to arrest attention, and fill the bosom with sensations that banish the insipid feelings of common life—holds not of inanimate nature. To give energy to such sensations, it must receive animation from the creative touch of a vivid fancy: described by the poet, or connected with the residence, actions, pursuits, or passions of great geniusses; it lives, as it were, personified by talents, and commands the interest that breathes around whatever is consecrated by fame. To Orgon. Quit the Pope's territory, by crossing the Durance; there view the skeleton of the navigation of Boisgelin, the work of the Archbishop of Aix, a noble project, and, where finished, perfectly well executed; a hill is pierced by it for a quarter of a mile, a work that rivals the greatest similar exertions. It has, however, stood still many years for want of money. The *vent de bise* gone, and the heat increased, the wind now S. W. my health better to a moment, which proves how pernicious that wind is, even in August.—20 miles.

The 30th. I forgot to observe that, for a few days past, I have been pestered with all the mob of the country shooting: one would think that every rusty gun in Provence is at work, killing all sorts of birds; the shot has fallen five or six times in my chaise and about my ears. The National Assembly have declared that every man has a right to kill game on his own land; and advancing this maxim so absurd as a declaration, though so wise as a law, without any statute or provision to secure the right of the game to the possessor of the soil, according to the tenor of the vote, have, as I am every where informed, filled all the fields of France with sportsmen to a great detriment. The same effects have flowed from declarations of right relative to tythes, taxes, feudal rights, &c. In the declarations, conditions and compensations are talked of; but an unruly, ungovernable multitude seize the benefit of the abolition, and laugh at the obligations or recompense. Out by day break for Salon, in order to view the Crau, one of the most singular districts in France for its soil, or rather want of soil, being apparently a region of sea flints, yet feeding great herds of sheep: View the improvement of Monsieur Pasquali, who is doing great things, but roughly: I wished to see and converse with him, but unfortunately he was absent from Salon. At night to St. Canat.—46 miles.

The

The 31st. To Aix. Many houses without glass windows. The women with men's hats, and no wooden shoes. At Aix waited on Monf. Gibelin, celebrated for his translations of the works of Dr. Priestley, and of the Philosophical Transactions. He received me with that easy and agreeable politeness natural to his character. He took every method in his power to procure me the information I wanted, and engaged to go with me the next day to Tour D'Aigues to wait on the baron of that name, president of the parliament of Aix, to whom also I had letters; and whose essays, in the *Trimestres* of the Paris Society of Agriculture, are among the most valuable on rural oeconomics in that work.—12 miles.

SEPTEMBER 1st. Tour d'Aigues is twenty miles north of Aix, on the other side of the Durance, which we crossed at a ferry. The country about the chateau is bold and hilly, and swells in four or five miles into rocky mountains. The president received me in a very friendly manner, with a simplicity of manners that gives a dignity to his character, void of affectation; he is very fond of agriculture and planting. The afternoon was passed in viewing his home-farm, and his noble woods, which are uncommon in this naked province. The chateau of Tour d'Aigues, before much of it was accidentally consumed by fire, must have been one of the most considerable in France; but at present a melancholy spectacle is left. The baron is an enormous sufferer by the revolution; a great extent of country, which belonged in absolute right to his ancestors, was formerly granted for quit rents, *cens*, and other feudal payments, so that there is no comparison between the lands retained and those thus granted by his family. The loss of the *droits honorifiques* is much more than has been apparent, as it is an utter loss of all influence; it was natural to look for some plain and simple mode of compensation; but the declaration of the National Assembly allows none; and it is feelingly known in this chateau, that the solid payments which the Assembly have declared to be *rachetable* are every hour falling to nothing, without a shadow of recompense. The people are in arms, and at this moment very unquiet. The situation of the nobility in this country is pitiable; they are under apprehensions that nothing will be left them, but simply such houses as the mob allows to stand unburnt; that the *metayers* will retain their farms without paying the landlord his half of the produce; and that, in case of such a refusal, there is actually neither law nor authority in the country to prevent it. Here is, however, in this house, a large and an agreeable society, and cheerful to a miracle, considering the times, and what such a great baron is losing, who has inherited from his ancestors immense possessions, now frittering to nothing by the revolution. This chateau, splendid even in ruins, the venerable woods, park, and all the ensigns of family and command, with the fortune, and even the lives of the owners at the
mercy

mercy of an armed rabble. What a spectacle! The baron has a very fine and well filled library, and one part of it totally with books and tracts on agriculture, in all the languages of Europe. His collection of these is nearly as numerous as my own.—20 miles.

The 2d. Monf. Le President dedicated this day for an excursion to his mountain-farm, five miles off, where he has a great range, and one of the finest lakes in Provence, two thousand toises round, and forty feet deep. Directly from it rises a fine mountain, consisting of a mass of shell agglutinated into stone; it is a pity this hill is not planted, as the water wants the immediate accompaniment of wood. Carp rise to 25lb. and eels to 12lb. (Note, there are carp in the lake Bourgeat, in Savoy, of 60lb.) A neighbouring gentleman, Monf. Jouvent, well acquainted with the agriculture of this country, accompanied us, and spent the rest of the day at the castle. I had much valuable information from the Baron de Tour d'Aigues, this gentleman, and from Monf. l'Abbé de —, I forget his name. In the evening I had some conversation on house-keeping with one of the ladies, and found, among other articles, that the wages of a gardener are 300 liv. (13l. 2s. 6d.); a common man-servant, 150 liv. (7l.); a bourgeois cook, 75 to 90 liv. (90 liv. are 3l. 18s. 9d.); a housemaid, 60 to 70 liv. (3l. 1s. 3d.) Rent of a good house for a Bourgeois 700 or 800 liv. (35l.)—10 miles.

The 3d. Took my leave of Monf. Tour d'Aigues' hospitable chateau, and returned with Monf. Gibelin to Aix.—20 miles.

The 4th. The country to Marseilles is all mountainous, but much cultivated with vines and olives; it is, however, naked and uninteresting; and much of the road is left in a scandalous condition, for one of the greatest in France, not wide enough, at places, for two carriages to pass with convenience. What a deceiving painter is the imagination!—I had read I know not what lying exaggerations of the *bastides* about Marseilles, being counted not by hundreds, but by thousands, with anecdotes of Louis XIV. adding one to the number by a citadel.—I have seen other towns in France, where they are more numerous; and the environs of Montpellier, without external commerce, are as highly decorated as those of Marseilles; yet Montpellier is not singular. The view of Marseilles, in the approach, is not striking. It is well built in the new quarter, but, like all others, in the old, close, ill-built, and dirty; the population, if we may judge from the throng in the streets, is very great; I have met with none that exceeds it in this respect. I went in the evening to the theatre, which is new, but not striking; and not in any respect to be named with that of Bourdeaux, or even Nantes; nor is the general magnificence of the town at all equal to Bourdeaux; the new buildings are neither so extensive, nor so good—the number of ships in the port not to be compared,

compared, and the port itself is a horse-pond, compared with the Garonne.—20 miles.

The 5th. Marseilles is absolutely exempt from the reproaches I have so often cast on others for want of newspapers. I breakfasted at the *Café d'Acajon* amidst many. Deliver my letters, and receive information concerning commerce; but I am disappointed of one I expected for Mons. l'Abbé Raynal, the celebrated author. At the table d'hôte, the Count de Mirabeau, both here and at Aix, a topic of conversation; I expected to have found him more popular, from the extravagancies committed in his favour in Provence and at Marseilles; they consider him merely as a politician of great abilities, whose principles are favourable to theirs: as to his private character, they think they have nothing to do with it; and assert, that they had much rather trust to a rogue of abilities, than put any confidence in an honest man of no talents; not, however, meaning to assert, that Mons. de Mirabeau deserved any such appellation. They say he has an estate in Provence. I observed, that I was glad to hear he had property; for, in such revolutions, it was a necessary hold on a man, that he will not drive every thing to confusion, in order to possess a consequence and importance which cannot attend him in peaceable and quiet times. But to be at Marseilles without seeing Abbé Raynal, one of the undoubted precursors of the present revolution in France, would be mortifying. Having no time to wait longer for letters, I took the resolution to introduce myself. He was at the house of his friend Mons. Bertrand. I told the Abbé my situation: and with that ease and politeness which flows from a man's knowledge of the world, he replied, that he was always happy to be of use to any gentleman of my nation; and, turning to his friend, said, here also is one, Sir, who loves the English, and understands their language. In conversing on agriculture, which I had mentioned as the object of my journey, they both expressed their surprise to find, by accounts apparently authentic, that we imported great quantities of wheat, instead of exporting, as we formerly did; and desired to know, if this were really the case, to what it was to be ascribed: and recurring, at the same time, to the *Mercure de France* for a statement of the export and import of corn, they read it as a quotation from Mr. Arthur Young. This gave me the opportunity of saying, that I was the person, and it proved a lucky introduction; for it was not possible to be received with more politeness, or with more offers of service and assistance. I explained, that the change had taken place in consequence of a vast increase of population, a cause still increasing more rapidly than ever.—We had an interesting conversation on the agriculture of France, and on the present situation of affairs, which they both think going on badly; are convinced of the necessity of an upper house in the legislature, and dread nothing more than a mere democratical government, which they deem a species of
republic,

republic, ridiculous for such a kingdom as France. I said that I had often reflected with amazement, that Monf. Necker did not assemble the states in such a form, and under such regulations, as would have naturally led to adopt the constitution of England, free from the few faults which time has discovered in it. On which Monf. Bertrand gave me a pamphlet he had published, addressed to his friend Abbé Raynal, proposing several circumstances in the English constitution to be adopted in that of France. Monf. l'Abbé Raynal remarked, that the American revolution had brought the French one in its train: I observed, that if the result in France should be liberty, that revolution had proved a blessing to the world, but much more so to England than to America. This they both thought such a paradox, that I explained it by remarking, that I believed the prosperity which England had enjoyed since the peace, not only much exceeded that of any other similar period, but also that of any other country, in any period since the establishment of the European monarchies: a fact that was supported by the increase of population, of consumption, of industry, of navigation, shipping, and sailors: by the augmentation and improvement of agriculture, manufactures, and commerce; and in a peculiar mass and aggregate, flowing from the whole, the rising ease and felicity of the people. I mentioned the authentic documents and public registers which supported such a representation; and I found, that Abbé Raynal, who attended closely to what I said, had not seen or heard of these circumstances, in which he is not singular, for I have not met with a single person in France acquainted with them; yet they unquestionably form one of the most remarkable and singular experiments in the science of politics that the world has seen; for a people to lose an empire—thirteen provinces, and to GAIN, by that *loss*, an increase of wealth, felicity, and power! When will the obvious conclusions, to be drawn from that prodigious event, be adopted? that all transmarine, or distant dominions, are sources of weakness: and that to renounce them would be wisdom. Apply this in France to St. Domingo, in Spain to Peru, or in England to Bengal, and mark the ideas and the replies that are excited. I have no doubt, however, of the fact. I complimented him on his generous gift to the society of agriculture at Paris of 1200 liv. for a premium; he said they had thanked him, not in the usual form, by the secretary signing alone, but had every one present signed it. He said, that he should do the same by the academies of sciences and belles lettres; and he has given the same sum to the academy at Marseilles, for a premium relative to their commerce. He said also, that he had formed a plan he should execute when he has saved money enough, which is to expend, by means of the society of agriculture, 1200 liv. a year in purchasing models of all the useful implements of husbandry to be found in other countries, especially in England,

and to spread them over France. The idea is an excellent one, and merits great praise; yet it is to be questioned, whether the effect would answer the expence. Give the tool itself to a farmer, and he will not know how to use it, or will be too much prejudiced to like it; a model he will still less take the trouble to copy. Gentlemen farming every where their own lands, with enthusiasm and passion for the art, would apply and use those models; but I fear that none such are to be found in France. The spirit and pursuits of gentlemen must be changed from their present frivolous turns, before any such thing could be effected. He approved of my recommending turnips and potatoes; but said, that good sorts were wanted; and mentioned a trial he had made himself, a comparison of the English and Provençal potatoes in making bread, and the English produced one-third more flour than the French.—Among other causes of bad husbandry in France, he named the illegality of usury; at present moneyed people in the country locked it up, instead of lending it for improvement. These sentiments of a justly celebrated writer do him honour; and it was pleasing to me to find, that he gave attention to objects which have almost monopolized mine; and yet more so to find, that though not young, he is in good spirits; and likely to live many years to enlighten the world by the productions of a pen that has never been employed but for the benefit of the human species.

The 8th. To Cuges. For three or four miles the road leads through rows of *basilides* and walls; it is made of powdered white stone, and, without exception, the most dusty I ever saw; the vines, for twenty rods on each side, were like a dressed head: the country all mountains of rock, with poor pines.—Uninteresting and ugly; the plains, of no great breadth, are covered with vines and olives. Meet capers first at Cuges. At Aubagne, I dined on six dishes, not bad, a dessert, and a bottle of wine, for 24*s*. and by myself too, for there was no table d'hôte. What Monsr. Dutens could mean by calling the post-house at Cuges a good *auberge*, is inexplicable; it is a miserable hole, in which I have one of the best rooms, without glass to the windows.—21 miles.

The 9th. The country to Toulon is more interesting; the mountains are bolder; the sea adds to the view; and there is one passage among the rocks, where are sublime features. Nine-tenths are waste mountain, and a wretched country of pines, box, and miserable aromatics, in spite of the climate. Near Toulon, especially at Olioules, there are pomegranates in the hedges, with fruit as large as nonpareils; they have a few oranges also. The basin of Toulon with ranges of three deckers, and other large men of war, with a quay of life and business, are fine. The town has nothing that deserves description; the great and only thing that is worth seeing, the dock-yard, I could not see, yet I had letters; but the regulation forbidding it, as at Brest, all applications were vain.—25 miles.

The

The 10th. Lady Craven has sent me upon a wild chase to Hyeres—one would think this country, from her's and many other descriptions, was all a garden; but it has been praised much beyond its merit. The vale is every where richly cultivated, and planted with olives and vines, with a mixture of some mulberries, figs, and other fruit trees. The hills are either rocks, or spread with a poor vegetation of evergreens, pines, lentiscus, &c. The vale, though scattered with white *bastides* which animate the scene, yet betrays that poverty in the robe of nature, which always offends the eye where olives and fruits form the principal cloathing. Every view is meagre, on comparison with the rich foliage of our northern forests. The only singular features are the orange and lemon trees; they here thrive in the open air, are of a great size, and render every garden interesting to those who travel to the south; but last winter's frost has shorn them of their glory. They are all so nearly destroyed as to be cut almost to the root, or to the trunk, but are in general shooting again. I conjecture that these trees, even when in health and foliage, however they may be separately taken, add but little to the general effect of a view. They are all in gardens, mixed with walls and houses, and consequently lose much beauty as the part of a landscape. Lady Craven's Tour sent me to the chapel of *Notre Dame de consolation*, and to the hills leading to Mons. Glapiere de St. Tropes; and I asked for father Laurent, who was, however, very little sensible of the honour she had done him. The views from the hills on both sides of the town are moderate. The islands Portecroix, Pourcurolle, and Levant (the nearest joined to the continent by a causeway and saltmarsh, which they call a pond), the hills, mounts, rocks, all are naked. The pines that spread on some of them have not a much better effect than gorse. The verdure of the vale is hurt by the hue of the olives. There is a fine outline to the views; but for a climate, where vegetation is the chief glory, it is poor and meagre; and does not refresh the imagination with the idea of a thick shade against the rays of an ardent sun. I can hear of no cotton in Provence, which has been reported in several books; but the date and pistachio succeed: the myrtle is indigenous every where, and the *jasminum*, *commune*, and *fruticans*. In l'Isle de Levant is the *genista candescens*, and the *teucrium herba poma*. Returning from my ride to the *hotel de Necker*, the landlord worried me with a list of English that pass the winter at Hyeres; there are many houses built for letting, from two to six louis a month, including all the furniture, linen, necessary plate, &c. Most of these houses command the prospect of the vale and the sea; and if they do not feel the *vent de bise*, I should suppose it must be a fine winter climate. In December, January, and February perhaps it may not incommode them, but does it not in March and April? There is a table d'hôte, very well served, at the *hotel de Necker* in winter, at 4 liv. a-head

each meal. View the King's garden here, which may be 10 or 12 acres, and nobly productive in all the fruits of the climate, its crop of oranges only last year was 21,000 liv. (918l. 15s.) Oranges at Hyeres have produced as far as two louis each tree. Dine with Monf. de St. Cafaïre, who has a pretty new built house, a noble garden walled in, and an estate around it, which he would sell or let. He was so obliging as to give me, with Doctor Battaile, much useful information concerning the agriculture and produce of this country. In the evening return to Toulon.—34 miles.

The 11th. The arrangement of my journey in Italy occupied some attention. I had been often informed, and by men that have travelled much in Italy, that I must not think of going thither with my one-horse chaise. To watch my horse being fed would, they assured me, take up abundantly too much time, and if it were omitted, with respect to hay, as well as oats, both would be equally stolen. There are also parts of Italy where travelling alone, as I did, would be very unsafe, from the number of robbers that infest the roads. Persuaded by the opinions of persons, who I suppose must know much better than myself, I had determined to sell my mare and chaise, and travel in Italy by the *veturini*, who are to be had it seems every where, and at a cheap rate. At Aix they offered me for both 20 louis; at Marseilles, 18; so the further I went I expected the price would sink; but to get out of the hands of the *aubergistes*, and the *garçons d'écuries*, who expected every where to make a property of me, I had it drawn into the street at Toulon, with a large label, written *à vendre*, and the price 25 louis: they had cost me at Paris 32. My plan succeeded, and I sold them for 22; they had brought me above twelve hundred miles, but yet were a cheap bargain to an officer who was the purchaser. I had next to consider the method to get to Nice; and will it be believed, that from Marseilles with 100,000 soulds, and Toulon with 30,000, lying in the great road to Antibes, Nice, and Italy, there is no diligence or regular voiture? A gentleman at the table d'hôte assured me, they asked him 3 louis for a place in a voiture to Antibes, and to wait till some other person would give 3 more for another seat. To a person accustomed to the infinity of machines that fly about England, in all directions, this must appear hardly credible. Such great cities in France have not the hundredth part of connection and communication with each other that much inferior places enjoy with us: a sure proof of their deficiency in consumption, activity, and animation. A gentleman, who knew every part of Provence well, and had been from Nice to Toulon, by sea, advised me to take the common barque, for one day, from Toulon, that I might at least pass the Isles of Hyeres: I told him I had been at Hyeres, and seen the coast. I had seen nothing, he said, if I had not seen them, and the coast from the sea, which was the finest object in all Provence; that it would be but one day

day at sea, as I might land at Cavalero, and take mules for Frejus; and that I should lose nothing, as the common route was the same as what I had seen, mountains, vines, and olives. His opinion prevailed, and I spoke to the captain of the barque for my passage to Cavalero.

The 12th. At six in the morning, on board the barque, Captain Jaffoirs, of Antibes; the weather was delicious; and the passage out of the harbour of Toulon, and its great basin, beautiful and interesting. Apparently it is impossible to imagine a harbour more completely secure and land-locked. The inner one, contiguous to the quay, is large, and seems formed by art; a range of mole, which it is built on, separating it from the great basin. Only one ship can enter at a time, but it could contain a fleet. There are now lying, moored, in two ranges, one ship, the Commerce, of Marseilles, of 130 guns, the finest ship in the French navy, and seventeen others of 90 guns each, with several smaller: in the great basin, which is two or three miles across, you seem absolutely inclosed by high lands, and it is only on the moment of quitting it, that you can guess where the outlet is, by which you are connected with the sea. The town, the shipping, the high mountain, which rises immediately above it, the hills, covered with plantations, and spread every where with *bastides*, unite to form a striking *coup d'œil*. But as to the Isles of Hyeres and the fine views of the coast, which I was to enjoy, my informant could have no eyes, or was absolutely without taste: they are, as well as all the coast, miserably barren rocks and hills, with pines only to give any idea of vegetation. If it were not for a few solitary houses, with here and there a square patch of cultivation to change the colour of the mountains, I should have imagined that this coast must have borne a near resemblance to those of New Zealand, or New Holland—dark, gloomy, and silent;—a savage *sombre* air spread over the whole. The pines, and ever-green shrubs, that cover the greatest part, cover it with more gloom than verdure. Landed at night at Cavalero, which I expected to have found a little town; but it consists of three houses only, and a more wretched place not to be imagined. They spread a mattress on a stone floor for me, for bed they had none; after starving all day, they had nothing but stale eggs, bad bread, and worse wine; and as to the mules which were to take me to Frejus, there was neither horse, ass, nor mule in the place; and but four oxen for ploughing the ground. I was thus in a pretty situation, and must have gone on by sea to Antibes, for which also the wind gave tokens of being contrary, if the captain had not promised me two of his men to carry my baggage to a village two leagues off, where mules were certainly to be had, with which comfort I betook myself to my mattress.——24 miles.

The 13th. The captain sent three sailors;—one a Corsican, another a mongrel Italian, and the third a Provençal: among the three, there was not
French

French enough for half an hour's conversation. We crossed the mountains, and wandered by crooked unknown paths, and beds of torrents, and then found the village of Gassang on the top of a mountain, which, however, was more than a league from that to which we intended to go. Here the sailors refreshed themselves, two with wine, but the third never drank any thing except water. I asked if he had equal strength with the others that drank wine? Yes, they replied, as strong for his size as any other man: I rather think, that I shall not soon find an English sailor who will make the experiment. No milk; I breakfasted on grapes, rye bread, and bad wine. Mules were reported to abound at this village, or rather that which we missed; but the master of the only two we could hear of being absent, I had no other resource, than agreeing with a man to take my baggage on an ass, and myself to walk a league further, to St. Tropes, for which he demanded three liv. In two hours reached that town, which is prettily situated, and tolerably well built, on the banks of a noble inlet of the sea. From Cavalero hither, the country is all mountain, eighteen-twentieths of it covered with pines, or a poor wilderness of evergreen shrubs, rocky and miserable. Cross the inlet, which is more than a league wide; the ferrymen had been on board a king's ship, and complained heavily of their treatment—but said, that now they were free men, they should be well treated; and, in case of a war, they should pay the English by a different account—it would now be man to man; before it was free men fighting with slaves. Land at St. Maxime, and there hire two mules and a guide to Frejus. The country the same mountainous and rocky desert of pines and lentiscus; but, towards Frejus, some arbutus. Very little culture before the plain near Frejus. I passed to-day thirty miles, of which five are not cultivated. The whole coast of Provence is nearly the same desert; yet the climate would give, on all these mountains, productions valuable for feeding sheep and cattle; but they are incumbered with shrubs absolutely worthless. The effect of liberty had better appear in their cultivation, than on the decks of a man of war.—30 miles.

The 14th. Staid at Frejus to rest myself;—to examine the neighbourhood, which, however, contains nothing—and to arrange my journey to Nice. At Frejus are remains of an amphitheatre and aqueduct. On enquiring for a voiture to go post, I found there was no such thing to be had; so I had no resource but mules. I employed the *garçon d'écurie* (for a postmaster thinks himself of too much consequence to take the least trouble), and he reported, that I should be well served for 12 liv. to Estrelles: this price, for ten miles, on a miserable mule, was a very entertaining idea; I bid him half the money; he assured me he had named the lowest price, and left me, certainly thinking me safe in his clutches. I took a walk round the town to gather some plants that were in blossom, and, meeting a woman with an ass-load of grapes, I asked her employment; and found,

found, by help of an interpreter, that she carried grapes from vineyards for hire. I proposed loading her ass to Estrelles with my baggage—and demanded her price.—40 *sols*. I will give it. Break of day appointed; and I returned to the inn, at least an œconomist, saving 10 liv. by my walk.

The 15th. Myself, my female, and her ass jogged merrily over the mountains; the only misfortune was, we did not know one word of each other's language; I could just discover that she had a husband and three children. I tried to know if he were a good husband, and if she loved him very much; but our language failed in such explanations;—it was no matter; her ass was to do my business, and not her tongue. At Estrelles I took post-horses; it is a single house, and no women with asses to be had, or I should have preferred them. It is not easy for me to describe, how agreeable a walk of ten or fifteen miles is to a man who walks well, after sitting a thousand in a carriage. To-day's journey all through the same bad country, mountain beyond mountain, incumbered with worthless evergreens, and not one mile in twenty cultivated. The only relief is the gardens at Grasse, where singular exertions are made. Roses are a great article for the famous *otter*, all of which is commonly supposed to come from Bengal. They say, that 1500 flowers go to a single drop; twenty flowers sell for 1 *sol*, and an ounce of the *otter* 400 liv. (17l. 10s.). Tuberoses, &c. are also cultivated for perfumes in immense quantities, for Paris and London. Rosemary, lavender, bergamot, and oranges, are here capital articles of culture. Half Europe is supplied with essences from hence. Cannes is prettily situated, close on the shore with the isles of St. Marguerite, where is a detestable state prison, about two miles off, and a distant boundary of the Estrelles mountains, with a bold broken outline. These mountains are barren to excess. At all the villages, since Toulon, at Frejus, Estrelles, &c. I asked for milk, but no such thing to be had, not even of goats or sheep: the cows are all in the higher mountains; and as to butter, the landlord at Estrelles told me, it was a contraband commodity that came from Nice. Good heaven!—what an idea northern people have, like myself, before I knew better, of a fine sun and a delicious climate, as it is called, that gives myrtles, oranges, lemons, pomegranates, jasmims, and aloes, in the hedges; yet are such countries, if irrigation be wanted, the veriest deserts in the world! On the most miserable tracts of our heaths and moors, you will find butter, milk, and cream; give me that which will feed a cow, and let oranges remain in Provence. The fault, however, is in the people more than the climate; and as the people have never any faults (*till they become the masters*) all is the effect of government. The arbutus, laurustinus, cistus, and Spanish broom, are found scattered about the wastes. Nobody in the inn but a merchant of Bourdeaux returning home from Italy; we supped together, and had a good deal of conversation, not uninteresting; he was melancholy to think,

think, he said, what a sad reputation the French revolution has wherever he has been in Italy. Unhappy France! was his frequent ejaculation. He made many enquiries of me, and said, his letters confirmed my accounts; the Italians seemed all convinced that the rivalry of France and England was at an end, and that the English would now have it in their power amply to revenge the American war, by seizing St. Domingo, and indeed all the possessions the French have out of France itself. I said the idea was a pernicious one, and so contrary to the personal interests of the men who governed England, that it was not to be thought of. He replied, that if we did not do it, we should be marvellously forbearing, and set an example of political purity sufficient to eternalize that part of our national character, in which the world thought us most deficient, *moderation*. He complained bitterly of the conduct of certain leaders of the National Assembly, who seemed to be determined on a bankruptcy, and perhaps a civil war.—22 miles.

The 16th. At Cannes, I was quite without a choice; no post-house, carriage, nor horses, nor mules to let; I was therefore forced again to take refuge in a woman and her ass. At five in the morning I walked to Antibes. This line of nine miles is chiefly cultivated, but the mountains rise so immediately, that, in a general idea, all is waste. Antibes, being a frontier town, is regularly fortified; the mole is pretty, and the view from it pleasing. Take a post-chaise to Nice; cross the Var, and bid adieu for the present to France. The approach to Nice is pleasing. The first approach to that country so long and justly celebrated, that has produced those who have conquered, and those who have decorated the world, fills the bosom with too many throbbing feelings to permit a bush, a stone, a clod to be uninteresting. Our percipient faculties are expanded; we wish to enjoy; and then all is attention, and willingness to be pleased. The approach marks a flourishing town; new buildings, the never-failing proof of prosperity, are numerous. Pass many gardens full of oranges. Arrive in time for dinner at the table d'hôte, *hotel de quatre nations*, and agree with the master of it for my apartment, which is exceedingly good, and dinner and supper at five Piedmontese livres a-day, that is five shillings. Here I am, then, in the midst of another people, language, sovereignty, and country—one of the moments of a man's life that will always be interesting, because all the springs of curiosity and attention are on the stretch. Several Frenchmen, but more Italians, at the table d'hôte; and the French revolution only talked of. The Frenchmen all in favour of it, and the Italians all against it, and absolute victors in the argument.—25 miles.

The 17th. I have no letters for Nice; and therefore, knowing nothing of the insides of the houses, I must be content with what meets the eye. The new part of the town is very well built; the streets strait and broad. The sea-view

is fine, and, for enjoying it in greater perfection, they have an admirable contrivance, which I have seen no where else. A row of low houses forming one side of a street, a quarter of a mile long, has flat roofs, which are covered with a stucco floor, forming a noble terrace, open immediately to the sea, raised above the dirt and annoyance of a street, and equally free from the sand and shingle of a beach. At one end some finely situated lodging-houses. The walk this terrace affords is, in fine weather, delicious. The square is handsome, and the works which form the port are well built, but it is small and difficult to enter, except in favourable weather; admits ships of near three hundred tons; yet, though free, has but an inconsiderable trade.—The number of new streets and houses building at present is an unequivocal proof that the place is flourishing, chiefly on the account of the resort of foreigners, principally English, who pass the winter here, for the benefit and pleasure of the climate. They are dismally alarmed at present, with the news that the disturbances in France will prevent many of the English from coming this winter; but they have some consolation in expecting a great resort of French. Last winter, there were fifty-seven English, and nine French; this winter, they think it will be nine English, and fifty-seven French. At the table d'hôte informed, that I must have a passport for travelling in Italy; and that the English consul is the proper person to apply to. I went to Mr. Consul Green, who informed me that it was a mistake, there was no want of any passport; but if I wished to have one, he would very readily give it. My name occurring to him, he took the opportunity to be very polite to me, and offered any thing in his power to assist me. On my telling him the object of my travels, he remarked, that the gardens here, and mixture of half garden and half farm, were rather singular, and if I called on him in the evening, he would walk and shew me some. I accepted his obliging invitation, and when I went again, met a Colonel Ross, a gentleman from Scotland, second in command in the King of Sardinia's marine, and at present in chief: having been much in Sardinia, I made some enquiries of him concerning that island, and the circumstances he instanced were curious. The *intemperia* is so prevalent in summer, from the quantity of evaporating water leaving mud exposed to the sun, as to be death to a stranger: but in winter it is a good climate. The soil wonderfully rich and fertile, but vast plains that would produce any thing are uncultivated. He has past one line of fifty miles by thirty, all plain and the land good, yet without one house, and mostly a neglected desert. The people are wretched, and deplorably ignorant: there are districts, he has been informed, where there are olives, and the fruit left rotting under the trees, for want of knowing how to make oil. In general, there are no roads, and no inns. When a traveller, or other person, goes into the island, he is recommended from convent to convent, or *curé* to *curé*, some of whom are at their ease; you

are sure to be well entertained, and at no other expence than a trifle to the servants. The plenty of game and wild-fowl great. The horses are small, but excellent; all stallions. One has been known to be rode four-and-twenty hours without drawing bit. I demanded to what could be attributed such a neglected state of the island? To government, I suppose? By no means; government has manifested every disposition to set things on a better footing. It certainly arises from the feudal rights of the nobility, keeping the people in a state of comparative slavery. They are too wretched to have the inducement to industry. Such is the case at present in many other countries besides Sardinia. When I see and hear of the abominable depredations and enormities committed by the French peasants, I detest the democratical principles; when I see or hear of such wastes as are found in Sardinia, I abhor the aristocratical ones. Accompany Mr. Green to view some gardens, which have a luxuriance of vegetation, by means of watering, that makes them objects worth attention; but the great product, and a most valuable one it is, are oranges and lemons; chiefly the former, and a few bergamots for curiosity. We examined the garden of a nobleman, something under two acres of land, that produces 30 louis d'or a-year in oranges only, besides all the crops of common vegetables. The great value of these products, such is the perversity of human life, is the exact reason why such gardens would be detestable to me, if under the æconomical management of the gentry of Nice. An acre of garden forms an object of some consequence in the income of a nobleman who, in point of fortune, is reckoned in good circumstances, if he has 150l. to 200l. a year. Thus the garden, which with us is an object of pleasure, is here one of economy and income, circumstances that are incompatible. It is like a well furnished room in a man's house, which he lets to a lodger.—They sell their oranges so strictly, that they cannot gather one to eat. A certain momentary and careless consumption is a part of the convenience and agreeableness of a garden; a system, which thus constrains the consumption, destroys all the pleasure. Oranges may certainly be sold with as much propriety as corn or timber, but then let them grow at a distance from the house; that open apartment of a residence, which we call a garden, should be free from the shackle of a contract, and the scene of pleasure, not profit.

The 18th. Walked to Ville Franche, another little sea-port of the King of Sardinia's, on the other side of the mountain, to the east of Nice. Call on Mr. Green, the consul, who has given me letters to Genoa, Alexandria, and Padoua: he has behaved with so friendly an attention, that I cannot omit acknowledging warmly his civilities. Learn this morning from him that Lord Bristol is somewhere in Italy, and that Lady Erne is probably at Turin; my stars will not be propitious if I do not see them both.

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The 19th. I have now waited two days merely for the means of getting away; I can go either by a *felucca* to Genoa, or with a *vetturino* to Turin; and there is so much for and against both schemes, that priority of departure is as good a motive for a preference as any other. If I go by Genoa to Milan, I see Genoa and a part of its territory, which is much, but I lose sixty miles of superb irrigation, from Coni to Turin, and I lose the line of country between Turin and Milan, which I am told is better than that between Genoa and Milan; as to Turin itself, I should see it in my return. But here is Luigi Tonini, a *vetturino*, from Coni, who sets out on Monday morning for Turin, which decides me; so with Mr. Green's kind assistance I have bargained with him to take me thither for seven French crowns. He has got two officers in the Sardinian service, and is not to wait longer for filling the third place. We have every day, at the table d'hôte, a Florentine Abbé, who has been a wonderful traveller—no man names a country which he has not traversed; and he is singular in never having made a note, making rather a boast that his memory retains every particular he would wish to know, even to numbers correctly. The height and measures of the pyramids of Egypt, of St. Peter's church at Rome, and St. Paul's at London, &c. with the exact length and breadth of every fine street in Europe, he has at his tongue's end. He is a great critic in the beauty of cities; and he classes the four *finest* in the world thus, 1. Rome.—2. Naples.—3. Venice.—4. London. Being a little inclined to the marvellous, in the idea of an old Piedmontese colonel, a knight of St. Maurice, a plain and unaffected character, and apparently a very worthy man; is pecked at the authority of Signore Abbate, to the amusement of the company.

The 20th, Sunday. Mr. Consul Green continues his friendly attentions to the last; I dined, by invitation, with him to-day; and, for the honour of Piedmontese grazing, ate as fine, sweet, and fat a piece of roast beef as I would ever wish to do in England, and such as would not be seen at the table d'hôte at the *quatre nations* in seven years—if in seven ages. An English master and mistress of the table, with roast beef, plumb pudding, and porter, made me drop for a moment the idea of the formidable distance that separated me from England. Unknown and unrecommended at Nice, I expected nothing but what could be shot flying in any town; but I found in Mr. Green both hospitality, and something too friendly to call politeness. In the evening we had another walk among gardens, and conversed with some of the proprietors on prices, products, &c. The description Mr. Green gives me of the climate of Nice in the winter is the most inviting that can be imagined; a clear blue expanse is constantly over head, and a sun warm enough to be exhilarating, but not hot enough to be disagreeable. *But, Sir, the vent de bise!* We are sheltered from it by the mountains; and as a proof that this climate is by far more mild than where you have felt that wind, the oranges and lemons which we have in such profusion

will not thrive either in Genoa or Provence, except in a very few spots, singularly sheltered like this. He remarked, that Dr. Smollet, in his description, has done great injustice to the climate, and even against the feelings of his own crazy constitution; for he never was so well after he left Nice as he had been at it, and made much interest with Lord Shelburne to be appointed consul, who told him, and not without some foundation, that he would on no account be such an enemy to a man of genius;—that he had libelled the climate of Nice so severely, that if he were to go again thither the Nissards would certainly knock him on the head. Mr. Green has seen hay made, and well made, at Christmas.

The 21st. Commenced my first Italian journey; of my two military companions, one was as stupid as a brick-bat, and the other too lively for me:—there are few things more repugnant to my nerves than the vivacity of inanity; I am not young enough for it. Here was also a friar, who made no compensation for the deficiencies of his countrymen:—low, vulgar, and ignorant; could speak no French, and but little Italian: I looked in vain for so many of his Piedmontese words in my dictionary, that I was soon tired of following him. We dined at Scarenò, and slept at Sospello, at both which places we joined the company of another *vetturino*, consisting of the Piedmontese colonel I had met at the table d'hôte, his brother an abbé, and another abbé a friend, all well bred polite men, who were very attentive to me as a foreigner, and had great readiness to answer all my enquiries: I reaped a good deal of information from their conversation. The three first days of this journey are employed in crossing three mountains; to-day we passed the Col de Prus. The features in the heights are interesting, wild, and great. The descent to Sospello is picturesque. —26 miles.

The 22d. My friend, the old Piedmontese colonel, commends the English character greatly, when it is truly English; that is, as I guessed by his explanations, when it is not a hurrying, bustling, expensive young man of great fortune, against whom he threw out some severe reflections. He desired my name, and where I lived in England, which he begged me to write down for him; and commended very much the object of my journey, which appeared so extraordinary to him, that he could not help putting many questions. The mountain we crossed to-day is yet more savage than that of yesterday; much of it wild, and even sublime. The little town of Saorgio and its castle are situated most romantically, stuck against the side of a mountain, like a swallow's nest against the side of a house. I had no opportunity of asking how many necks are broken in a year, in going peaceably to and fro; but the blackness of this town, and the total want of glass, make it gloomy as well as romantic; indeed the view of all these mountain-towns, where there may be so much happiness with so little appearance of it, is forbidding.

bidding. Tende, which is the capital of a district, and gives name to this great ridge of mountain (*Col de Tende*), is a horrid place of this sort, with a vile inn; all black, dirty, stinking, and no glafs.—30 miles.

The 23d. Out by four in the morning, in the dark, in order to cross the Col de Tende as soon after break of day as possible, a necessary precaution they say, as the wind is then most quiet; if there be any storm, the passage is dangerous, and even impracticable; not so much from height as from situation, in a draught of wind between Piedmont and the sea. The pass in the rocks, for some distance before mounting the hill, is sublime; hemmed in among such enormous mountains and rocks, that they reminded me a little of the amazing pass in the Pyrenees, but are much inferior to it. In the face of one of them is a long inscription to the honour of Victor Amadeus III. for making the road; and near it an old one, purporting that the eleventh duke of Savoy made the old road, to connect Piedmont and Nice, *à proprie spese con tutta diligenza*. This old road is passable by mules only, and is that by which Mr. Dutens passed the Col de Tende. I shall observe once for all, that the new one is a most useful and princely undertaking. From within a few miles of Nice, where it is not finished, to Limon cost 3,500,000 liv. (175,000l.) It winds prodigiously, in order to pass the steepest mountains, in such angles as to admit carriages without difficulty. The worst part is that which goes up to the Col de Tende; this has not been made with equal attention as the rest, perhaps because they have begun to execute a vast design of perforating the mountain. At present, notwithstanding the goodness of the road in summer, it is absolutely impassable in winter for carriages, and with difficulty sometimes even with mules, by reason of the immense falls of snow. They have opened a cavern like a vault of rock, about thirty *trebulchi* long, and wide enough for carriages to pass, but it soon divides into two passages, one for going and another for returning, which is found cheaper than one large enough for both; the whole will be above five hundred *trebulchi*, and will demand such an expense as leaves little hope of seeing it executed in this century. Take the new road, however, for all in all, and it is a work that does honour to the king and country. Descend into the rich and beautiful vale of Piedmont, a few miles before Coni, and between the Alps and Appenines, which here separate, one range running from hence to Calabria, I believe uninterruptedly, and the other to Constantinople. Amongst the maps never made, but much wanted, is one of the mountains of Europe, to shew at one *coup d'œil* which are connected, and which separate: this separation of the Alps and Appenines is so narrow, that they would, on a map on any scale, appear as one range; they connect with all the mountains of France, by Dauphiné, Vivarais, and Auvergne, but not with the Pyrenees; I have myself travelled the whole range of those
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from sea to sea. *Quære*, Do they connect with Germany, Poland, &c.? Perhaps they may with those of the hereditary dominions of the House of Austria. This would make but two ranges of mountains on the continent of Europe, the Alps and the Pyrenees; for all the Spanish connect with the latter, unless those of Norway and Sweden do not join the Russian, Polish, &c.—Reach Coni, which is strongly fortified, and well situated; but as for inns, the *croce bianca*, which they speak of as being excellent, afforded me a good room enough, but without a single pane of glass in the windows, only ragged paper—and such a *commodité*!—let me drive the recollection from my memory! Here we lost the company of the old colonel, his brother, and friend; they went five miles further, to the estate of one of them at Centalle. Sup at the table d'hôte. Our landlady is a tall well looking *virago*; the officers made love to her with one hand, while they supped with the other. They then asked me a thousand questions about English duelling. Was it in a circle? At what distance? On horseback? With what pistols? &c.—37 miles.

The 24th. The friar and one of the officers proceeded no further; the other and myself for Turin. On leaving Coni, the view from the fortifications of the Alps is very fine; a range of them, capped with snow, is now seen by us to the left; Mont Viso among them very high. At Centalle we were stopped by the servant of my friend, the colonel, who had orders to conduct us to the house of the *curé*, to take chocolate. The brother of the colonel is, it seems, *curé* and *archiprêtre* of the parish. It was impossible to be received with more kindness and hospitality than I was here. The colonel started a plan for keeping us to dinner, and his brother immediately begged we would change our intention of sleeping at Carignan for Racconis, which would enable us to dine with him. To this we readily assented. I now found, that the colonel was the Chevalier Brun, on a visit to his brother, who has built an excellent parsonage-house, as we should call it, at his own expence, and has two *curés* under him as *archiprêtre*; he has arch-hospitality also; gave us an admirable dinner, well served, and excellent wine, and wished I would make a longer stay. As this was the first Italian house I had been in, except inns, it was interesting enough to excite all my curiosity and attention. Expressing a wish to have some conversation with a practical cultivator, they had the goodness to walk with me to the Count de Bonifante, who lives on his own estate here, and farms it. I soon found that this nobleman loved the subject; for he seemed to take a pleasure in answering my enquiries. We walked over his, and some of his neighbours farms for more than two hours; and though my questions were pretty numerous, he was so kind as to meet them with the utmost willingness of explanation. If I have many such days as this in Italy, I shall be equally well pleased and informed. Centalle was the residence of the Marquis de Suza. Take my leave
of

of this agreeable and hospitable family, which I shall long remember with pleasure. Pass Savignan, a considerable and pretty town; and what is much better to my eyes, a fine range of level plain, all rich and much watered. The scene in some places is charming: the road is like a fine alley, passing through a new mown garden; the meadows are as level as a die, without a mole-cast, or ant-hill: thanks to watering! The mowing neat; the hay now cocking; rows of trees every where, and not being in strait lines, the appearance is pleasing. It is an observation I have more than once made, and it is no where so exemplified as in this country, that there are beauties resulting from extreme fertility, that belong to a flat which would be hurt by inequalities of soil. The approach to Racconis is by a double row of trees on each side of the road, with two shady paths, very pleasing even by moon-light; but my fellow-traveller, with his drawn sword, ready to pass at the breast of a robber, should any attack us, did not people these shades with the most agreeable figures of the fancy. He says there are many robbers in Piedmont; and that travelling in the dark is always dangerous. Such things are to be laid to the account of government; and a pretty satire it is on despotism, not to be able to keep its roads clear from robbers. At Racconis, a great trade in winding filk: a beggarly inn—paper windows, &c.—27 miles.

The 25th. Pursuing our road, pass a country-seat of the Prince of Carignan, with a great inclosure of plantation, and many Lombardy poplars. Cross the Po by a most commodious ferry; a platform on two boats; the coach drove on and off without our moving. Why have we not such ferries in England? All a rich level country till we come near the mountain of Turin, and pass the chateau of Moncaglia, the present residence of the Count d'Artois. Reach Turin; drive to the *hotel royal*; all full. To the *hotel d'Angleterre*; all taken for the Prince of Condé. To the *bonne femme*, where a good landlady received me. I was in time for the table d'hôte, at which were several French refugees, whose accounts of affairs in France are dreadful. These were driven from their chateaus, some of which were in flames; it gave me an opportunity of enquiring by whom such enormities were committed; by the peasants, or wandering *brigands*? they said, by peasants, undoubtedly; but that the great and indisputable origin of most of those villainies, was the settled plan and conduct of some leaders in the National Assembly, in union with, and by the money of, *one other person of great rank*, who would deserve the eternal execrations and reproaches of all true Frenchmen and every honest man: that when the assembly had rejected the proposal of the Count de Mirabeau, to address the King to establish the *milice bourgeoise*, couriers were soon after sent to all quarters of the kingdom, to give an universal alarm of great troops of *brigands* being on the actual march, plundering and burning every where, at the instigation of

aristocrats,

aristocrats, and calling on the people to arm immediately in their own defence: that by intelligence afterwards received from different parts of the kingdom it was found, that these couriers must have been dispatched from Paris at the same time*. Forged orders of the King in Council were likewise sent, directing the people to burn the chateaus of the aristocratical party; and thus, as it were by magic, all France was armed at the same moment, and the peasants instigated to commit the enormities which have since disgraced the kingdom.

—22 miles.

The 26th. This being the first Italian city of renown for beauty that I have seen, I have been all eyes to-day. Some travellers have represented it as the prettiest town in Europe, and the Strada di Po the finest street. I hurried to it with eagerness. I was in the middle of it, asking for it. *Questa, questa!* replied an officer, holding up his hands, as if to point out an object of great beauty which I did not see, and in truth I saw it not. It is strait and broad, and nearly regular. Two rows of brick barns, might be so equally. The houses are of an ugly obfuscated brick; a few have stucco, and that old and dirty: the scaffold holes in the walls of all the rest are left unfilled; some of them are enlarged by time, and several courses of bricks between those holes, not pointed, which has as bad an effect; the windows are narrow and poor; some with iron balconies—some without; the arcades, for there is a row on each side of the street, would alone be destructive of beauty: the arches are plastered, which patches the line with white: and through them are exhibited nothing but poor shops that incumber their spans with all sorts of lumber; the lamps are fifty or sixty yards asunder. In a word, there are fifty streets at London to which this cannot be compared. If those who have travelled in Italy think this street fine, what am I to meet with in other towns? —The Strada della Dora Grossa is by far a finer street than that of the Po, but the houses are greatly too high. There is a beautiful arcade entrance to the herb-market, which seems to have furnished the idea of that at the new buildings of Somerset-house. The streets are almost all quite regular, and at right angles. I expected that this circumstance would have been attended with much more beauty than it is. It gives too great a sameness; the constant return of the same angles tires the eye; and I am convinced, that a city would be much more striking, and more admired, that had varied lines instead of uniform ones. Circles, semi-circles, crescents, semi-ellipses, squares, semi-squares, and compounds, composed of these, mixed with the common oblongs, would give a greater air of grandeur and magnificence. The most splendid object I have seen at Turin is the stair-case and saloon in the chateau con-

* Afterwards at Paris this fact was confirmed to me.

tiguous to the royal palace. There is nothing at Versailles, except the gallery, to be compared with it. The front of this edifice is fine, and the whole does honour to Juvara. This morning I should have delivered my letters, but am unlucky. The Marchese de Palavicino, president of the Agrarian Society, and Signore Biffatti, the secretary of it, are both in the country. Signore Capriata, the *president en second*, I met with, but he is no practical farmer; he has been obliging enough, however, to promise me an introduction to some persons who are conversant with agriculture. Meeting with these disappointments, I began to fear I might want the intelligence that was necessary to my design; and be in that ineligible situation of seeing only the outsides of houses, and knowing nothing of the persons within. With time thus on my hands, I enquired for a bookseller, and was directed to Signore Briolo, who prints the memoirs of all the learned bodies here; among others, those of the Agrarian Society, which I bought, and afterwards turning over, found that I made a pretty conspicuous figure in one written by the Cavaliere di Capra, colonel of the regiment of Tortona, on the size of farms. He is a bitter enemy to large ones; not content with strictures on Piedmont, he presses England into his service, and finds it necessary to refute me, as I appear in the translation of Mons. Freville, from which he quotes passages which I never wrote. I wished to assure the author that it was the French translator, and not the English farmer that he had refuted. I laughed very heartily with Signore Capriata at this adventure of the memoirs. In the evening to the opera; the theatre is a fine one, though not the principal; the house nearly full, yet all the world is in the country.

The 27th. The Cavaliere Capra having seen Signore Capriata, I this morning received a visit from him: I was glad of an opportunity to remark to him that he had quoted passages erroneously from my Political Arithmetic. He said, he was sorry he should misunderstand me; and beginning at once to declaim against great farms, I begged to remark, that my opinion was exactly the same at present as it had always been, that the size of farms should be left absolutely free. He was violent against great ones in Piedmont, which he said ruined and depopulated the country, as I should find when I came among the rice-grounds in my way to Milan. Signore Capra was polite, tendered me every service in his power, and expressed the utmost readiness to assist my enquiries. Signore Briolo, as soon as he understood who I was, shewed me every attention in his power; and that I might have the benefit of conversing with such persons as he thought most suitable to my enquiries, he made known my arrival to Signore Fontana, a practical chemist and deputy secretary to the Agrarian Society; to Signore Gio. Piet. Mariadana, professor of botany in the university; to Signore il Dottore Buniva, his assistant, who travelled in France and England as a naturalist. From these

gentlemen I had this morning a visit, and an interesting conversation on the present agricultural state of Italy. To Signore Briolo I was also indebted for an introduction to Signore Giobert, academician, and of the Agrarian Society, who has gained a prize by a memoir on the quality of earths and manures. Viewed the King's palace, not so splendid as to raise disagreeable emotions in the breast of a philosophical spectator; and no marks of provinces having been oppressed to raise it. Of the pictures, which are numerous, those which pleased me best, are a virgin, child, and St. John, by Lorenzo Sabattini; Apollo slaying Marsias, by Guido; a Venus, by Carlo Cignani; a sick woman, by Gerard Dow; a virgin and child after Raphael, by Saffa Ferrata. Vandyke shines greatly in this collection; there are the children of Charles I. finely done; a man and woman fitting; but above all, Prince Tomaraso di Carignano on horseback, which for life and force of expression is admirable. In the evening to the opera, and being Sunday the house was full. The *Lasca Fiera*; there is a pretty duet, between Contini and Gaspara, in the first act.

The 28th. Walked to Moncaglia early in the morning. The palace is boldly situated on a hill, the Windsor of Piedmont:—commands noble views of the Po, and a rich scene of culture. After dinner, on horse-back to Superga, the burying place of the royal family; where the bodies of these princes repose more magnificently than the Bourbons at St. Denis. The view from the tower is, I suppose, the finest *farmer's* prospect in Europe. You look down on much the greater part of Piedmont as on a map, and the eye takes in Milan at eighty miles distance; the whole, with such an horizon of mountains, as is no where else to be found,—for the enormous masses of snow, which the Alps present, are easier conceived than described.

The 29th. Signore Briolo was this morning my conductor to Gruliascho, to view the farm, by appointment of Signore Bracco, to whom Signore Capriata had spoken for that purpose; we walked by the nobly planted road that leads to Suza, and I was glad to find, that my Turin bookseller was a farmer, though *à la metà*, and answered those useful enquiries, which I have long found abundantly convenient, always to have ready arranged in my head, and adapted to the people into whose hands chance may throw me. We dined together at the village, in a villainous hole, much better adapted to offend the senses than to gratify them. Our repast finished, we sallied forth to find Signore Bracco; he shewed us several watered meadows, and explained all the particulars; after which, coming to the house, lo! instead of a farmer or *metayer*, as I expected, I found a large house, in a style superior to any farm one, and that he was a bailiff to a Signore, I do not know whom, jeweller to the King and court; an awkward explanation of this came on, and then I found this person knew of my coming two days before:—to mend the matter, after making us wait some time

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he shewed himself. I was pressed to enter:—whether it were, that a hot walk, or a bad dinner had fretted me, or, in fine, that I did not like the jeweller's physiognomy, I know not, but I begged to be excused, and persisted in my refusal. A rich citizen at his country villa is to me a formidable animal.—Had he said he was a farmer, and would converse on the subject, or any thing of that tendency, it had been otherwise; but I departed *brusquement*, with a character, I believe, *molto selvaggio*. In the evening, some beautiful passages in the *Pastorella Nobile* brought me into better temper.

The 30th. The intendant Bissatti returned to Turin, and I had the pleasure of a visit from him; he carried me to the university, and some other places which I had not seen before; Signore Capra also, and Dr. Buniva, favoured me with their company. The knight, I find, is as complete a croaker as could ever issue from the school of Dr. Price himself. Piedmont furnishes an instance, which if I had touched upon to Signora Capra, he would have pressed it into his service on the question of farms. But there are not many circumstances more curious in politics than the contrast between great and small dominions. Here is a court sufficiently splendid; a palace well kept; an army (not equally well kept) of 30,000 men; fortifications many, and among the first in the world, and a power of receiving with hospitality and splendour the princes of the blood of France; all this is done with thirty millions of French money: if the comparison had been made in the late king's reign, the circumstances would have been stronger. The King of France had six hundred millions; that is to say, twenty times as much: he could, therefore, with equal proportions, have twenty such palaces, or more exactly an hundred, as there are five in Piedmont; twenty such courts, and an army of 600,000 men. But, instead of this, the difference between the palaces of the two Kings and their courts, their parade and their vanity, is not in the *ratio* of one-fourth of their revenue; and as to the army of the King of Sardinia (proportions preserved) it is six times more powerful than that of the King of France: but the contrast goes further; for, while the debts of this country are inconsiderable, those of France are so great, that the *deficit* alone is more than five times the whole revenue of Sardinia.

OCTOBER 1st. The political state of Piedmont at present depends almost entirely on the personal character of the King, who is esteemed an easy good natured man, too much imposed on by a set of people without merit. The consequence of which is, that talents and all sorts of abilities, instead of being in the posts for which they are qualified, are found only in retirement. I am told, that he often takes bank-notes in his pocket-book, and at night, if he have not given them away, expresses uneasiness; yet this is with an empty treasury and an incomplete ill-paid army. This conduct is remarkably different from that of

the princes his Majesty's predecessors, who, as all the world knows, were good œconomists, and kept themselves so well prepared, that they were able to turn opportunities to their notable advantage, which must have passed barren of events under a different system of government. The King's motives, however, are excellent, and no faults are found with his government that do not flow from that sort of goodness of heart which better befits a private station than a throne. Similar errors are not expected from the prince of Piedmont, who is represented as a man of good understanding, with, however, rather too great a tincture of religion. Nothing can be more regular and decent than the conduct of all the court; no licentious pleasures are here countenanced; and very little that looks like dissipation. How the Count d'Artois passes his time is not easy to conceive; for a prince who was dying with *ennui* in the midst of Versailles, for want of pleasures that had not lost their lustre, one would suppose that of all the courts in Europe there was scarcely one to be found less adapted than this to his feelings, whatever it might be to his convenience.

The 2d. To Vercel, by a *vetturino*; I find but one agreeable circumstance in this way of travelling, which is going as slow and stopping as often as you please: I walked most of the way, and generally out-walked the coach, except when there was any little descent. A gentleman, a proprietor and cultivator of rice near Vercel, supped with us, who was communicative. —45 miles.

The 30th. To Novara, much rice; some yet uncut; they are threshing it every where, and we meet gleaners loaded with it: a nasty country, as ill to the eye as to the health: there hang the limbs of a robber in the trees, in unison with the *sombre* and pestiferous aspect of a flat woody region. Cross the Tesino, deep, clear, and rapid. This river parts the dominions of the King of Sardinia from those of the Emperor. At Buffalora cross the *naviglio grande*, the greatest canal for irrigation that was ever made. Sleep at Magenta. —30 miles.

The 4th, Sunday. Reach Milan in the forenoon. This great city stands in the midst of a dead level country, so thickly planted that you see nothing of it till you are in the streets. To the *Albergo del Pozzo*, in time to wait on the Abbate Amoretti, secretary of the Patriotic Society, to whom I had letters from Monf. de Brouffonet and Signore Songa of London: I found the Abbate admirably well lodged, in the *palazzo* of the Marquis de Cusani: this, said I to myself, looks well, to find a man of letters in a splendid apartment, and not poked, like a piece of lumber, into a garret: it is a good feature in the Italian nobility. I entered his apartment, which is a cube of about thirty feet, from a great saloon of forty or fifty. He received me with easy and agreeable politeness which impresses one at first sight in his favour. Soon after he returned my visit.

visit. I find him an agreeable, well-informed, and interesting character. Waited also on the Abbate Oriani, astronomer royal, who expressed every wish to be of use to me. At night to the opera; a most noble theatre; the largest as well as handsomest I have seen; the scenes and decorations beautiful. Though it is Sunday, I look with amazement at the house, for it is three parts full, even while much of the world are in the country:—how can such a town as Milan do this? Here are six rows of boxes, thirty-six in a row; the three best rows let at 40 louis d'or a box. This is marvellous for an inland town, without commerce or great manufactures. It is the PLOUGH alone that can do it. I am delighted with the accommodation of the pit; one sits on broad easy sofas, with a good space to stir one's legs in: young persons may bear being trussed and pinioned on a row of narrow benches, but I am old and lazy, and, if I do not sit at my ease, would not care to sit there at all.——10 miles.

The 5th. In the morning, deliver letters to Signore Bignami and Vassalli, and the Mess. Zappas, gentlemen in commerce, from whom I might receive information relative to the exports, &c. of the Milanese. At noon, to the Society of Agriculture (called the Patriotic Society), which fortunately for me, who am a member, had a meeting to-day: the Marchese di Visconti in the chair, with ten or a dozen members present, to all of whom Signore Amoretti introduced me. I never expect much from societies of this sort; but this of Milan was to-day employed on a button and a pair of scissors: it seems they want at this city to make the finer sorts of hardware, in order to rival those of England, and lessen the import, which, in spite of every obstacle, is very great: the idea originates with the government, and is worthy of its little ideas; a true peddling spirit at present throughout Europe. An artist in the town had made a button and half a pair of scissors, one half English, and the other half of his own manufacture, for which he claimed and had a reward. Similar are the employments of societies every where! In England, busied about rhubarb, silk, and drill-ploughs:—at Paris, about fleas and butterflies;—and at Milan, about buttons and scissors! I hope I shall find the *Georgofili*, at Florence, employed on a top-knot. I looked about to see a practical farmer enter the room, but looked in vain. A goodly company of i Marchesi, i Conti, i Cavalieri, i Abbati, but not one close clipped wig, or a dirty pair of breeches, to give authority to their proceedings. We met, in what was the Jesuit's College, in the Brera, a noble building, containing many apartments equally splendid and convenient. The Marchese Visconti asked me to his country-seat; and the Cavaliere Castiglioni, who has travelled in America with the views of a natural historian, and who intends to print the journal of his voyage, hopes to meet me soon at his brother the count's. Milan has been represented as very dear, and may be so when no thought is taken to save expence, ordering what you want, and leaving the bill to the host; but as such methods do not agree with my
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purse, I pay, by agreement, for my room, dinner and supper served in it, as there are few tables d'hôtes in Italy, 6 liv. of Milan a-day, or an *ecu*, equal to 4s. English. The pit, at the opera, is 2 liv. 5*s.* and coffee for breakfast 7*s.* in all about 5s. 8d. a-day; but, seeing buildings, &c. adds something. I am very well served for this, except in soups, which are detestable, for I hate macaroni and abominate paste. I have read so much of the horrors of Italian inns, that I am very agreeably surprized to find them in the great towns, Turin and Milan for instance, as good as in France; yet I am not at the best here,—for I understand the *alberghi reale* and *imperiale* are the first; and I was not at the best at Turin. But village ones between the great towns are bad enough. In France, one is rarely waited on at inns by men; in Italy hitherto never by women; I like the French custom best. Ferret among the booksellers, and find more tracts, in Italian, upon agriculture than I expected. At night to the opera; the pit is so commodious and agreeable, that it is a good lounge; the sofas and chairs are numbered; they give you a ticket, which marks your seat; but the performers are poor. It was the *Impresario in Augusta*, by that beautiful composer, Cimarola; there is a quintetto in it, than which nothing could be more pleasing, or repeated with more applause.

The 6th. Signore Amoretti, whose attentions and assiduity are such as I shall not soon forget, this morning introduced me to Signore Beecken, a counsellor in the court of his Imperial Majesty; and then we went together into the country, six or seven miles, to a farm in the road to Pavia, belonging to the Marquis Visconti, to see the method of making the Lodesan cheese; attended the whole operation, which is so totally different from what we use in England, that skill in making may have a great effect in rendering this product of Lombardy so superior to all others. The cheese, and the enquiries, took up the whole day; so that it was five in the evening before we got back to Milan, where they dined with me at the *pozzo*; an itinerant band of music giving a serenade under the windows, to the *illustrissimi, eccellentissimi, nobili Signori Inglese*. This day has passed after my own heart, a long morning of activity, and then a dinner, without one word of conversation but on agriculture. Signore Beecken is a sensible well informed German, who understands the importance of the plough; and Abbate Amoretti's conversation is that of a man who adds the powers of instruction; to the graces that enliven company.

The 7th. Attended the Marquis de Visconti, and Signore Amoretti to Mozate, the country-seat of the Count de Castiglione, about sixteen miles north of Milan. Stop very near the city to view the *Chartreuse*, which, since the emperor seized the revenues, and turned the monks out, has been converted into a powder magazine. View, in passing, the fine church of Ro, and the Marquis of Litta's villa at Leinate, in which the gardens are conspicuous. The Italian taste

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was the undoubted origin of what we see in France; but decoration is carried much higher. Marble basons, with fine statues, too good for the situation: *jets d'eau*, temples, colonades, and buildings, without end, almost connected with the house; latticed, and clipped bowers and walks; miles of clipped hedges—terraces and gravel walks, never well kept, with abundance of orange-trees, are the features; and they are all in profusion. The expence enormous, both to form and to keep. There is a pinery, and not more than five or six others in the whole duchy of Milan. Reach Mozzate. The countess appeared what we call a genteel good sort of woman, with nothing of that species of foppery and affectation that forms the *fine lady*. The moment I saw the Count de Castiglione, I was prejudiced in his favour; his physiognomy is pleasing; and the instantaneous easy affability, mixed with great quickness and vivacity, tells one in a moment, that time would not be lost in his company. I was not deceived. He entered presently on the object of my travels; and I was highly pleased to find, that he was a practical farmer. After dinner, we made an excursion to a considerable plantation he has executed with great judgment and spirit. The count shewed me a part of his farm also,—but this is not equally successful. In the evening, while the rest of the company were at cards, he satisfied my numerous enquiries concerning the husbandry, &c. of the neighbourhood, in a manner that left me little to wish. After breakfast, the next morning I returned to Milan. The feature which struck me most in this visit to an Italian nobleman, at his country-seat, is the great similarity of living, and of manners in different countries. There are few circumstances in the table, attendance, house, and mode of living, that vary from a man of similar rank and fortune in England or France. Only French customs, however, predominate. I suppose one must go for new manners to the Turks and Tartars; for Spain itself, among people of rank, has them not to give: and this circumstance throws travellers, who register their remarks, into a situation that should meet with the candour of readers: those who record faithfully, must note things that are common, and such are not formed to gratify curiosity. Those who deal much in adventures, so contrary to our own manners as to excite surprise, must be of questionable authority; for the similarity of European manners, among people of rank or large fortune, can hardly be doubted: and the difference among their inferiors is, in many cases, more apparent than real. I am much pleased with this family: the countess is a good woman, for she loves her children, her husband, and the country. Her husband has life, animation, quickness of conception, and that attention to agriculture, which made me wish him for a neighbour. In our return, stop at Desio, the villa of the Marquis of Cusino, which is in a style that pleases me. The house is not upon too great a scale, and therefore finished and furnished:

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the rooms are more elegant than splendid—and more comfortable than showy. There is one apartment, in encaustic painting, said to be the first executed in Italy. The second floor contains thirteen bed-chambers, with each a small servant's-room, and light closet: and they have all such a comfortable, clean, English air; and are so neat, without any finery, that, had the floors been deal, instead of brick, I should have thought myself in my own country. I have read travels that would make us believe, that a clean house is not to be met with in Italy; if that were once true, things are abundantly changed. I like this villa much better than the master does, for he is rarely here for a fortnight at a time, and that not often. The gardens are splendid in their kind; lattice-frames of lemons twenty feet high, with espaliers of oranges, both full hung with fruit, have, to northern eyes, an uncommon effect; but they are all covered with glass in the winter. Here is a pinery also. Dine in the village on trout, fresh from the lake of Como, at 3 liv. the pound, of 28 ounces. In the evening returning to Milan, after an excursion instructive in my principal object, and equally agreeable in the little circumstances that have power sufficient either to gild or shade every object: Pass the house of the Marchesa di Fagnani, who has been much in England, and celebrated here for being the lady with whom our inimitable Sterne had the rencontre at Milan, which he has described so agreeably.—32 miles.

The 9th. This day was appointed for visiting a few objects at Milan, for which Signore Beecken had the goodness to desire to be my *cicerone*; his chariot was ready after breakfast, and we went from sight to sight till five o'clock. Buildings and pictures have been so often and so well described, that for modern travellers nothing is left, if they expatiate, but to talk of themselves as much as of the objects. I shall note, in a few words, the things that struck me most. I had read so much of the cathedral, and came to it with such expectation, that its effect was nothing. There are comparative measurements given of it with St. Paul's and St. Peter's, that seem to rank it in the same class for magnitude: to the eye it is a child's play-thing compared to St. Paul's. Of the innumerable statues, that of St. Laurence flayed is the finest. The architecture of the church of St. Fedele, by Pellegrino, is pleasing; it contains six columns of granite; and there are other fine ones also in that of St. Alessandro. But I found Padre Pini, professor of natural history, a better object than his church; he has made a great and valuable collection of fossils, and has taken the means necessary for self-instruction, much travel, and much experiment. At St. Celso, there are two statues of Adam and Eve, by Lorenzi, that cannot be too much admired; and a Madonna, by Fontana. Here also are pictures by the two Procaccinis, that will detain your steps. The great hospital is a vast building, once the palace of the Sforzas, Dukes of Milan, and given by Duke Francis for this use.

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It has a net revenue of a million of livres, and has at present above one thousand three hundred patients. At the Abbey of St. Ambrose, built in the ninth century, and which has round arches, anterior to gothic ones, they shewed us a MS. of Luitprandus, dated 721, and another of Lothaire, before Charlemagne. If they contained the register of their ploughs, they would have been interesting; but what to me are the records of gifts to convents for saving souls that wanted probably too much cleaning for all the scrubbing-brushes of the monks to brighten? Unquestionably the most famous production of human genius at Milan is the last supper of Lionardo de Vinci, which should be studied by artists who understand its merit, as it is not a picture for those who, with unlearned eyes, have only their feelings to direct them. View the Ambrosian library.

The 10th. The climate of Italy, I believe, is generally in extremes; it has rained almost incessantly for three days past, and to-day it pours. I have made a sad blunder, I find more and more, in selling my French equipage; for the dependence on hiring, and on the *vetturini*, is odious. I want to go to-morrow to Lodi, &c. and have lost much time in finding a horse and chaise; and after all can have only a miserable thing, at $7\frac{1}{2}$ liv. a day.—In the evening, at the opera, Signore Beecken came to me in the pit, and asked me if I would be introduced to one of the prettiest ladies at Milan? *Senza dubbio*. He conducted me to the box of Signora Lamberti, a young, lively, and beautiful woman, who conversed with an easy and unaffected gaiety, that would make even a farmer wish to be her *cicisbeo*. The office, however, is in the hands of another, who was seated in his post of honour, in the front of the box, *vis-a-vis* the lady. —Refreshments—suppers—magnificent *ridotto*. Having mentioned the *cicisbei*, I may observe, that the custom seems to flourish at Milan; few married ladies are without this necessary appendix to the state: there were to night a great number of them, each attending his fair. I asked an Italian gentleman why he was not in his post as a *cicisbeo*? He replied, he was not one. How so? *If you have either business or other pursuit, it takes too much time*. They are changed at pleasure, which the ladies defend, by saying, that when an extension of privileges not proper to give is expected, to part with is better than to retain them.

The 11th. To Lodi, through twenty miles of such amazing exertions in irrigation, that we can have in England no idea of it. At that town I found myself in the midst of the world; it was the night of terminating the opera season of the fair: this had drawn so much company from the neighbouring towns, that the great inn of the *Columbina*, formed out of a monastery, was full in an hour. At night the opera-house formed a gorgeous display:—we waited half an hour for the arch-duke and arch-duchess. The house was well

lighted with wax; new to me, for in common their theatres have only darkness visible. It is small, but most elegant, new built this year: the decorations are neat; but the boxes, which are fitted up by the proprietors, are finished with great show and expence; as fine as glass, varnish, and gilding can make them; and being lighted within made a blazing figure: the company crowded and well dressed; diamonds sparkled in every part of the house, while the expectation of pleasure, more animated in Italian than in French or English eyes, rendered the *coup d'œil* equally striking and agreeable; the profusion of dancers, dresses, scenes, &c. made me stare, for a little place of not more than ten or twelve thousand souls. No evening could pass with a more animated festivity; all the world appeared in good humour: the vibrations of pleasurable emotions seemed more responsive than common, for expression is one great feature in Italian physiognomy. I have dwelt the more on this spectacle, because I consider it in a political light, as deserving some attention. Lodi is a little insignificant place, without trade, and without manufactures.—It is the part of a dominion that may be said to have neither, and cut off from all connection with the sea: yet there is not a town in France or England, of double the population, that ever exhibited a theatre so built, decorated, filled, and furnished as this of Lodi.—Not all the pride and luxury of commerce and manufactures—not all the iron and steel—the woollen or linen—the silk, glasses, pots, or porcelain of such a town as Lodi, ever yet equalled this exhibition of butter and cheese. Water, clover, cows, cheese, money, and music! These are the combinations—that string Italian nerves to enjoyment, and give lessons of government to northern politicians. The evening would have been delicious to me, if I had had my little girl with me; I could not help picturing her by my side, supposing the expressions of her pleasure, and giving an imaginary presence to her smiles, her enquiries, and her enjoyment. In truth it was better adapted to her age than to mine.—20 miles.

The 12th. I had brought a letter to a Signore Mayer, lieutenant of dragoons, who yesterday, when I waited on him, introduced me to the Cavaliere Don Bassiano Bona Noma, who promised to find a person this morning for conducting me to a celebrated dairy of his near Lodi; he was as good as his word, and by his means I was introduced into two dairies, one of 90 cows, and assisted in making the cheese. In the afternoon to Codogno, through fifteen miles of dead flat, of a singular aspect; it is intersected by ditches, without hedges, but a row of pollard poplars and willows on each side. The heads of these trees form a woodland, as the fields are very small, and looking through the stems, under the covert of their heads, is something like the prints I have seen of the forests of Tasso, but without the wildness or enchantment. The inhabitants here are neither witches, nymphs, nor knights, but cows and frogs: the music

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of the latter not quite so agreeable as last night's warblings of Senesino. In truth this country is better for these two animals than for man. The whole is a water sponge; the ditches innumerable; now water, now mud; the climate hot; and ventilation excluded by a croud of aquatics. I figured sickness and disease in every quarter: and the want of scattered habitations renders the whole silent and solitary, in spite of a considerable population, that is concealed by the endless pollards. Willows, ditches, mud, and frogs! these are features in perfect contrast to the scenes of last night! yet they are attended by a fertility that gives warbling to the throat, and quivering to the fantastic toe of beauty. At Codogno waited on Signore Bignami, a considerable cheese-merchant. I was in luck; a numerous company spent the evening with him, from whom he selected a party well acquainted with grass and cows; and retiring into another apartment, they had the goodness, with him and his son, to dedicate some time to the satisfying of my enquiries; and I should be very backward if I did not observe that the free and agreeable manner in which they did it, proves equally their liberality and politeness. Codogno is a neat little town of about eight thousand people. And note (for the thing is extraordinary), an opera here too; another new built theatre, of this year. It is not so large, or so much decorated as that of Lodi, but the form is more pleasing and more commodious; it is more circular. There are apartments contiguous for the first singers and dancers, communicating with a noble inn, the *albergo del teatro*.—15 miles.

The 13th. This morning Signore Bignami had kindly appointed for examining one of the principal dairies in the country, noted for making good cheese; fortunately the farmer proved communicative and liberal,—conducted us to the scene of action very readily, and directed his dairy-man to answer my enquiries. We attended the making of a cheese, and then walked over the farm: the farmers seem much at their ease. Take leave of my very friendly conductors, and reach Crema, in the Venetian state. Here also a new-built opera-house, and the Mara from London first singer; they did not appear to relish too much her altitudes of division,—yet she was considerably applauded. Great powers in singing, when much exerted in difficult passages, surprize much more than they please. The airs that touch the heart, are what the poet calls *lengthened sweetnesss long drawn out*, that breathe a continuity of melody, flowing, not broken notes. The number of theatres in this part of Italy is astonishing: two great ones at Milan; in twenty miles, another, at Lodi; in fifteen, one way, Codogno; in ten, another, Crema; in ten, another, Plaisance, &c.—yet trade and manufacture are very inconsiderable.—16 miles.

The 14th. To Lodi, through ten miles more of the same country; bad road through the state of Venice; but the moment you enter the Milanese, you find an excellent one. Return to Milan.—30 miles.

The 15th. The country continues flat, much of it watered, but without such exertions as to Lodi; all a crowded scene of willows. Vaprio, where we stopped, is a poor place, with a dirty, miserable, wretched inn: here I am in a chamber, that sinks my spirits as I sit and look around me; my pen, ink, and tablets, are useless before me; I want them for two or three subjects that have passed across my mind in the journey, but I can do nothing; to arrange ten words with propriety, is an insurmountable effort. I never in my life wrote three lines to please myself, when the circumstances around were untoward or disagreeable; a clean, neat apartment, a good fire, something to eat better than paste-soup, with tolerable wine, give a lightness to the bosom, and a facility to the ideas. I have not yet read any of the Abbate Amoretti's pieces; but if he writes badly in that elegant apartment, and with all the circumstances of ease and luxury around him, I shall not have so good an opinion of his head, as I think I shall always have of his heart. This chamber of Vaprio is contrast sufficient to his in the Palazzo Cusani. I cannot write, so much nestle in this nidus of fleas and bugs, which they call a bed.—20 miles.

The 16th. So much rain has fallen in the night, that the Adda has risen too much to permit a carriage to reach the ferry; we waited, therefore, four hours till the water sunk. This is a circumstance to which a traveller is liable every day in Italy; for the rivers are so little under command, that a night's heavy rain will stop him. An impatient traveller, waiting on the banks of a river for the water's flowing, might, by equal genius, be set off as well in poetry, as a patient one is represented expecting till all was passed.—The environs of the Adda here are fine; on the side of the Vaprio, high land, that commands the wooded vale. Arrive, at last, at Bergamo. I had a letter to Dr. Maironi da Ponte, secretary of the academy of Bergamo, to whom I went directly. I mounted a steep hill into the city, which is on the top of it; and searched hard for the doctor; after examining several streets, a lady from a window, who seemed to pity my perplexity (for I had been conducted to three or four streets in vain), informed me, that he was in the country,—but that if I returned in the morning, I should have a chance of seeing him. What a black, dirty, stinking, dismal place! I stared at some well dressed people I met, wondering what they had to do there; thanking my stars that I was not an inhabitant of Bergamo; foolishly enough, as if it were the brick and mortar of a place that give felicity, and not the connections formed from infancy, and matured by habit.—12 miles.

The 17th. Mount the hill again, in search for Signore Maironi; and hearing he has a brother, to find him, should I fail. I repaired to the street where the lady gave me information the night before; she was luckily at her window, but the intelligence cross to my wishes, for both the brothers were in the country; I need

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not go to the door, she said, for there were no servants in the house. The dusk of the evening in this dark town had last night veiled the fair *incognita*, but looking a second time now, I found her extremely pretty, with a pair of eyes that shone in unison with something better than a street of Bergamo. She asked me kindly after my business, *Spero che non è un gran mancamento?* words of no import, but uttered with a sweetness of voice that rendered the poorest monosyllable interesting. I told her, that the bosom must be cold, from which her presence did not banish all feeling of disappointment. It was impossible not to say something a little beyond common thanks. She bowed in return; and I thought I read in her expressive eyes, that I had not offended; I was encouraged to ask the favour of Signore Maironi's address in the country—*Con gran piacere ve lo darò.*—I took a card from my pocket; but her window was rather too high to hand it. I looked at the door: *Forzi è aperta.*—*Credo che sì*, she replied. If the reader be an electrician, and have flown a kite in a thunder-storm, he will know, that when the atmosphere around him becomes highly electric, and his danger increases, if he do not quickly remove, there is a cobweb sensation in the air, as if he was inclosed in an invisible net of the filmiest gossamer. My atmosphere, at this moment, had some resemblance to it: I had taken two steps to the door, when a gentleman passing, opened it before me, and stood upon the threshold. It was the lady's husband; she was in the passage behind, and I was in the street before him, she said, *Ecco un Signore Inglese che ha bisogno d'una direzione a Sig. Mairioni.* The husband answered politely, that he would give it, and, taking paper and pencil from his pocket, wrote and gave it me. Nothing was ever done so concisely: I looked at him askance, and thought him one of the ugliest fellows I had ever seen. An ill-natured by-stander would have said, that his presence prevented a farming from becoming a sentimental traveller. Certain it is, one now and then meets with terrible eyes in Italy; in the north of Europe they have attractive powers; here they have every sort of power; the sphere of the activity of an eye beam is enlarged, and he who travels as I do for the plough, must take care, as I shall in future, to keep out of the reach of it. From the ramparts of the town, below the house of the count de Brembate, there is a prospect of fertile land, hardly to be equalled. In front, to the south, a range of Appenines rises above the fog, that hangs over a part of the plain. To the west, an immense curve of the Alps, that bound the Milanese and Piedmont; their heads uninterruptedly in snow, from one of the finest mountain-barriers to be imagined. To the east, the view an unbroken, unlimited level. This vast plain, at one's feet, seems a level wood, with towns, churches, towers, and houses. Near Bergamo, the angle of vision permits the fields to be seen, and therefore more picturesque. Simular features must give similar prospects, this resembles that of the Superga. It is as hot to-day, and every day of sun-shine, as in England in June.

The 18th. Yesterday I agreed with a *vetturino*, to take me this morning, at six o'clock, to Brescia; but not being perfectly well, I insisted that he should not come for me without his *vettura*, nor before the time. The rascal knocked me up at five, and then without the carriage; it was only four steps, he said, and wanted to hurry away my trunk. I begin to know them, and therefore steadily refused to stir: after much vain persuasion, away they went, and in three quarters of an hour returned. The fellow drove me a full mile and half, on the road to Brescia, to an inn, where there was another *vetturino*, to whom he had fold me; and there I found myself, packed with three other persons, in the worst place; to the contrary of all which the scoundrel had signed an agreement. My expressions of anger only got me laughed at. The world has not such a set of villains as these *vetturini*. I have read guides and directories, and travels, that speak of this way of journeying as passable;—if not good, very bearable; but they must be very partial, or very careless, if they mention them without indignation. Their carriages are wretched, open, crazy, jolting, dirty dung-carts; and as to their horses, I thought, till I saw them, that the Irish garrans had no rivals on the globe; but the *cavalli di vetturini* convinced me of the error. My company were two merchant-like people, and a young man going to the university of Padua; the two first repeating prayers, and counting beads. How the country came to be well irrigated, is a question? Pater-nosters will neither dig canals, nor make cheese.—32 miles.

The 19th. I had letters for Signore Pilati, secretary to the society of agriculture; he was in the country at his brother's farm, whither I went with pleasure: he was to introduce me to count Corniano, the president, but he is absent, twenty miles out of my road. In the evening, to the opera; the house large, but ugly: the *Avara*, badly acted; and the taste of the audience (the pit, not the boxes, shew a nation) still worse. Puns, conceits, distortions, and exaggerated action, gained great applause. A child, telling his name, of ten or a dozen hard syllables, and an exaggerated mimicry of attempting to repeat them, were encored more violently than the finest airs would have been. This depravity of national taste is amazing, amongst a people that have produced such proofs of genius in almost every walk of life.

The 20th. After a repetition of the old plagues, to find a *vetturino* for Verona, agree at last at the extravagant price of 33 *lire*. Depart, after dinner, with a young woman and a boy of eight or nine years old. She had not two ideas beyond her snuff-box, and a crucifix. I have no opinion of Venetian police, from the villainous roads through all their territory; they consist every where of great stones, broken pavements, or mud. The country is not near so rich as the Milanese, but all thickly inclosed with hedges, full of mulberries; and incumbered, to use Professor Symonds's just expression, with pollards for training vines. Reach Desenzano in the dark. What my religious companion did with

with herself, I know not; I supped alone, thanking God she had not the eyes of the Bergamasque fair. In the night, I thought the noise of water was different from that of a stream, and opening the windows in the morning, found it the waves of a fine lake. The *Lago di Garda* was out of my recollection. — 15 miles.

The 21st. Coast the lake, with good views of it for several miles. From Brescia to Verona, but especially to Defenzano, I believe there are fifty crosses by the side of the road for deaths. When a person is murdered, they set up a cross for the good of his soul. They had better institute a police for that of his body. What a scandal to a government are such proofs of their negligence! yet that of Venice is called a wise one.—Impassable roads, towns unlighted, and a full harvest of assassinations; with men counting their beads, and women crossing themselves, are the chief signs of wisdom I have yet seen. Arrive at Verona in time to deliver a letter to Signore Cagniola, astronomer and secretary of the Agrarian Society: this must be a pretty institution, a society of farmers, with an astronomer for their secretary. He introduced me at the coffee-house of the Piazza to some lovers of agriculture; and made an appointment with the president of the society for to-morrow.—25 miles.

The 22d. Ill luck: the president is obliged to go into the country; and he thinks me, I suppose, like Italian theorists, tied to a town. Signore Cagniola directed his servant to shew me to the house of Signore Michael Angelo Locatelli, to whom he had named the object of my journey last night. I found this gentleman, who is engaged in commerce, but who has two farms in his hands, ready to converse with me on the subject of my enquiries; of Signore Cagniola, I saw or heard no more. I felt myself uncomfortable at Verona, till I had seen the amphitheatre, which is in truth a noble remain of antiquity, solid and magnificent enough yet to last perhaps some thousands of years; that of Nîmes, cluttered up with houses, must not be named with this. As I stood on the verge of this noble building, I could not but contemplate in idea, the innumerable crowds of people who had been spectators of the scenes exhibited in it: the reflection was attended with what is to me a melancholy impression—the utter oblivion in which such hosts are now lost! time has swept their memories from the earth—has left them no traces in the records of mankind; yet here were wit and beauty, wealth and power; the vibrations of hope and fear; the agitations of exertion and enterprize—all buried in the silence of seventeen hundred years!—I read the works of so few poets, that I know not if the idea of such oblivion have been to them as melancholy as it is to me; if so, they have doubtless given energy to the sentiment, by the force and beauty of their expressions.

The 23d. This morning, I took a *cicerone* to attend me to view churches and

and palaces, an uncomfortable method, but when a traveller has one principal pursuit, such secondary objects must give way. The great fault here, as every where else, is being carried to too many things. Nothing strikes more at Verona than the works of an architect, whose name is little known in England, San. Michael Michieli; they are of distinguished merit, and must please every eye. The chapel of the Pellegrini family, in the Bernardine church, and the rotunda of *St. Georgio*, are beautiful edifices. There is something singular in the Palazzo Bevilacqua, an idea which might have been copied with more success, than many others that have been repeated often. The Palazzo di Configlio is simple and elegant, and presents one of the most pleasing examples of an arcade, for a street or square. The theatre is large, but nothing after Milan. My expences at Brescia, and at Verona are, dinner 3 *pauls*, supper 2, chamber 2; which, at 5d. English, are 2s. 11d. a-day; and as I have rooms not at all bad, good beds, and am as well served at the meals as I require, it is remarkably cheap.

The 24th. The country to Vicenza is all flat, and mostly of a singular face; rows of elm and maple pollards, with vines trained up, and from tree to tree; between the rows arable. This system is not disagreeable till it grows tedious to the eye.—32 miles.

The 25th. Wait on Count Tiene, to whom I had a recommendation; he opened the letter, but found it was to another Count Tiene, who lived in the country, near Vicenza; reading in it, however, some expressions of commendation, which friends are apt to use in such letters, he, with great ease and politeness, as he returned me the paper, offered me any assistance in his power: "Yours, Sir, is an errand that ought to recommend you to all mankind; and if you find the least difficulties with others, I beg you will return to this house," which is one of the Palazzi di Palladio. I waited then on the Abbate Pierropan, professor of physics and mathematics. He had the direction, for some years, of the æconomical garden, given by the state for experiments in agriculture, now in the hands of the Agrarian Academy: he received me with great politeness; and not only expressed every wish to assist me, but entered immediately on the business, by proposing a walk to call on the Count de Boning, president of that academy, in our way to the garden. I have a poor opinion of all these establishments on a small scale; in any hands, they are not calculated to do much; and in hands not truly practical, they are calculated to do nothing. The Count de Boning, finding that I wished to converse with some real common farmers, appointed the afternoon for going into the country, about three miles, to a farm of his, where I should find an intelligent person: he then took his leave for the present,—and Signore Pierropan and myself proceeded to the villa of the Count de Tiene; as he was absent for an hour only, we employed that time

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in walking a little further, to view the celebrated rotunda of Palladio, belonging to Count Capra, one of the three greatest works of that great genius they possess at Vicenza. It is of a beautiful mean, between decoration and simplicity; the distribution seems a new and original thought, much more adapted, however, to Italy than to England; for, in the space of one hundred Vicentine feet, we might, relatively to our climate and manners, have a house far exceeding it. I am concerned to see so delicious a morsel suffered to go much to decay; the plaister on the brick columns is wearing off, and other neglect visible. The beauty of the environs of Vicenza exceeds any thing I have seen in Italy, viewed from the hill on which these houses, and the church Santa Maria del Monte, are situated; the city in the rich plain, and the hills spread with white buildings, crowned by the Alps, are fine. The Count de Tiene, with the assistance of another nobleman, of more experience, who happened to be present, gave me some information, relative to the part of the Vicentine in which their estates are situated. Quitting him, I begged the Abbate Pierropan to favour me with his company at dinner, by which means I had the benefit of his conversation so much longer on the favourite topic. The Abbate de Traico, vice-president of the academy, joined us. After dinner, according to appointment, to the Count de Boning, whose coach was ready, and carried us to the farm. Fortunately the farmer, a sensible and intelligent man, was ready to answer all such enquiries as I put to him. At night, returned to the city, after a rich day, that pays for the trouble of travelling.

The 26th. My friendly Abbate, continuing his obliging offices, had the goodness to accompany me this morning to a very famous woollen fabric, at present under the direction of an Englishman; and to a magazine of earthen-ware, in imitation of Mr. Wedgwood. It is surely a triumph of the arts in England, to see in Italy Etruscan forms copied from English models. It is a better imitation than many I have seen in France. View the Olympic theatre of Palladio, which pleases all the world; nothing can be more beautiful than the form, or more elegant than the colonade that surrounds it. Of all his works here, I like the Palazzo Barbarana least. I am sorry to see, that most of Palladio's edifices are of bricks stuccoed, except the Palazzo Ragione, which is of durable stone; and that there is hardly one of them which is not out of repair. The roof of the Palazzo di Ragione, which must offend every eye, is not of Palladio; only the case of arcades that surround the building, which is one vast room of two hundred feet by eighty, used for the courts of justice, and also as a common *jakes* by the mob, and dreadfully garnished. A pretty use to which to apply an edifice of Palladio. The brick columns of this great architect are of the finest work I ever saw; and some of the stucco but now failing, after two hundred years. At Verona and Vicenza, there are very few new houses, and no signs,

that I could see, of the wealth and prosperity of the present age. There are exceptions, but they are few. A silk merchant here has built a good house; and Signore Cordelina, an advocate at Venice, a large and handsome one, that cost 100,000 ducats, without being finished: he made his fortune by pleading.

The 27th. To Padua. The country, which has been called a garden by travellers, not at all better cultivated than before, but deeper and richer. The same flat, lined into rows of pollards and vines in the same manner; very little irrigation, except some rice. Waited on Signore Arduino, experimenter in agriculture, on a farm, or rather a garden, of twelve acres, given by the state. I had heard much of this æconomical garden, and of the great number of useful experiments made in it; so much, indeed, that it weighed considerably with me in the arrangement of my journey; Venice was no object; and I could not, if I took Padua, have time for the Pontine marshes and Rome, which, by the direct road, I could have reached from Milan; but an experimental farm, the first I was assured in Europe, and which had thrown light on various important enquiries, was an object which I ought, as a farming traveller, to prefer to any city, and I determined accordingly. Signore Arduino received me politely, and appointed to-morrow for that gratification. At night to the opera, the *Due Baroni*, of Cimarosa, whose music to me has always something original and pleasing; but though the parts were not ill performed, and the orchestra powerful, yet the house being almost empty,—and those in it wearing such a shabby appearance, and all the musicians so dirty and undressed, that I felt here, what I have often done before, that half the charms of a theatre depend on the audience;—one must be in good humour—a certain exhilaration must be springing in the bosom; willingness to enjoy must be expanded into enjoyment, by the sympathy of surrounding objects. Pleasure is caught from eyes that sparkle with the expectation of being pleased. Empty boxes, and a dirty pit, with a theatre but half lighted, made the music, with all its gaiety, *sombre*; I left *Gulielmi's Pastorella nobile*, for the silence of my chamber.—
21 miles.

The 28th. In the morning, viewing buildings, of which some are worth the trouble: then to deliver letters, but I was not fortunate in finding Messieurs the professors at home: Signore Arduino was so by appointment, and shewed me the experimental farm, as it ought to be called, for he is professor of practical agriculture in this celebrated university. I will enter into no detail of what I saw here. I made my bow to the professor; and only thought, that his experiments were hardly worth giving up the capital of the world. If I keep my resolution, this shall be the last æconomical garden that I will ever go near. Among the buildings I viewed to-day, I was much struck with the church Santa Justina: though built in no perfect style, it has, on entering, an effect
unusually

unusually imposing. It is clean, and well kept; the pavement a very fine one, of marble—and the magnitude being considerable, forms, on the whole, a splendid *coup d'œil*. That of St. Anthony is little, on comparison, and made less by multiplied divisions and numerous decorations. Numbers were on their knees before the faintest shrine, to which millions have resorted. Here mingled faith, folly, and enthusiasm, have sought consolation, and found more than they merited. The Palazzo di Consiglio, which we should call the town-hall, is one of the greatest—if not *the* greatest room in Europe. It is three hundred feet long, and one hundred broad; it does not want the excrementitious garniture of that of Vicenza.

The 29th. Waited, by appointment, on Signore Carbury, professor of chymistry; a lively pleasing man, with whom I wished to converse a little on the application of his science to agriculture; but that was not easy. Politics came across him, in which I happened to mention the extraordinary prosperity of England since the American war; and he took the clue, and conducted it through such a labyrinth of admirals, generals, red hot balls, and floating batteries:—Rodney, Elliot, Necker, and Catherine, with Lord knows what besides, that I thought he meant to make a tour as great as Mr. Wraxal's. He however gave me a note to the celebrated astronomer, Signore Toaldo, to whom I wanted an introduction, and whose observatory I viewed. He assured me, that he continues firmly of the same opinion, of which he has always been, relative to the influence of the moon on our seasons, and the importance of attending to the lunar period of eighteen years. I begged the titles of his memoirs, as I had yet procured only his *Meteorologia applicata all' Agricoltura*; he said, the others were difficult to find, but he would give me them. For this generous offer, I expressed my warmest thanks, and readily accepted it. On descending into his library, he presented me with the supplement to what I had; and also his tract, *Della Vera Influenza*, &c. After some other conversation, he told me, the price was 8 *lire*, and the supplement, 30 *soldi*. I was at a loss to know what he meant, by telling me the price of his book; for, to offer him money, would, I feared, affront him. After some minutes, he again reminded me, that the price was 9½ *lire*: on which I took out my purse. The *Vera Influenza*, he said, was only 6 *lire*; but being scarce, he must have eight for it, which, with 30s. for the other, made 9½ *liv*. I paid him, and took my leave. There was not the least reason to expect Signore Toaldo to make me, an utter stranger, a present of a farthing; but his manner made me smile. I had left a letter yesterday at the house of the Abbate Fortis, well known in England by his travels in Dalmatia; to-day I received a visit from him. He has that liveliness and vivacity which distinguish his nation; was polite in his offers of service, and entered into conversation concerning the vines of his country. He travelled, many years

ago, with Lord Bristol and Professor Symonds; and I was glad to find, that he spoke as handsomely of them both, as I have heard them both mention him.

This is the third evening I have spent by myself at Padua, with five letters to it; I do not even hint any reproach in this; they are wise, and I do truly commend their good sense: I condemn nobody but myself, who have, for fifteen or twenty years past, whenever a foreigner brings me a letter, which some hundreds have done—given him an English welcome, for as many days as he would favour me with his company, and sought no other pleasure but to make my house agreeable. Why I make this minute at Padua, I know not; for it has not been peculiar to that place, but to seven-eighths of all I have been at in Italy. I have mistaken the matter through life abundantly—and find that foreigners understand this point incomparably better than we do. I am, however, afraid that I shall not learn enough of them to adopt their customs, but continue those of our own nation.

The 30th. I had been so sick of *vetturini*, that I was glad to find there was a covered passage boat that goes regularly to Venice; I did not expect much from it, and therefore was not disappointed to find a jumble of all sorts of people; except those of fortune. There were churchmen, two or three officers, and some others, better dressed than I should have looked for, for in Italy people are obliged to be economical. At Dolo, the half way place, I formed, for dinner, a little party, of two Abbati, an officer, and a pretty Venetian girl, who was lively and sensible. We dined by ourselves, with great good humour. After leaving Fusina, there is from the banks of the canal (I walked much of the journey), at the distance of four miles, a beautiful view of the city. On entering the Adriatic, a party of us quitted the bark, and, to save time, hired a large boat, which conveyed us to this equally celebrated and singular place; it was nearly dark when we entered the grand canal. My attention was alive, all expectancy: there was light enough to shew the objects around me to be among the most interesting I had ever seen, and they struck me more than the first entrance of any other place I had been at. To Signore Petrillo's inn. My companions, before the gondola came to the steps, told me, that as soon as Petrillo found me to be a Signore Inglese, there would be three torches lighted to receive me:—it was just so: I was not too much flattered at these three torches, which struck me at once as three pick-pockets. I was conducted to an apartment that looked upon the grand canal, so neat, and every thing in it so clean and good, that I almost thought myself in England. To the opera. A Venetian audience, a Paduan, Milanese, Turinese, &c. exactly similar for dancing. What with the stupid length of the ballets, the importance given to them, and the almost exclusive applause they demand, the Italian opera is become much more a school
of

of dancing than of music. I cannot forgive this, for of forty dances, and four hundred passages, there are not four worth a farthing. It is distorted motion, and exaggerated agility; if a dancer place his head in the position his heels should be in, without touching the ground; if he can light on his toes, after twirling himself in the air; if he can extend his legs, so as to make the breadth of his figure greater than the length; or contract them to his body, so as to seem to have no legs at all; he is sure to receive such applause, so many bravos, and bravissimos, as the most exquisite airs that ever were composed would fail to attract. The *ballarine*, or female dancers, have the same fury of motion, the same energy of distortion, the same tempest of agility. Dances of such exquisite elegance, as to allure attention, by voluptuous ease, rather than strike it by painful exertion, are more difficult, and demand greater talents: in this superior walk, the Italians, where I have been, are deficient.—24 miles.

The 31st. My first business was to agree with a gondolier, who is to attend me for 6 *paoli* a day. This species of boat, as all the world knows, is one of the most agreeable things to be found at Venice; at a trifling expence, it equals the convenience of a coach and a pair of horses in any other city. I rowed out to deliver letters. Venice is empty at present, almost every body being in the country; but I met with Signore Giovanne Arduino, superintendant of agriculture throughout the Venetian dominions, who has a considerable reputation, for the attention he has given to this object, and for some publications on it. It may be supposed, from his residence in this city, that he is not himself a practical husbandman. Spent a few hours among palaces, churches, and paintings. Every where in Italy, the number of these is too great to dwell on. I shall only note, that the picture which made the greatest impression on me, was the family of Darius at the feet of Alexander, by Paul Veronese. The expression of the moment is admirably caught; the story well told; the grouping skilful; the colouring mellow and brilliant; the whole nature; all is alive; the figures speak; you hear the words on their lips; a calm dignity is admirably mixed with the emotions of the moment. Here was a subject worthy of employing a genius. It is in the Palazzo Pisani. Titian's presentation in the temple, in the Scuola della Carità, pleased me greatly. His bewitching pencil has given such life and lustre to some figures in this piece, that the eye is not soon satisfied with viewing it. The Doge's palace contains such a profusion of noble works by Tiziano, Tintoretto, Paolo Veronese, Bassano, and Palma, as to form a school for artists to study in. Cochin, in his *Voyage d'Italie*, has given the particulars, with criticisms that have less offended the Italians, than most other works of a similar kind. The brazen horses, given to Nero by Tiridates, carried to Constantinople by Constantine, and brought thence by the Venetians, when they took that city, are admirable: pity they are not nearer to the eye.

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The mouths of the lions, not less celebrated than Venice itself, are still in existence; I hope regarded with detestation by every man that views them. There is but one accusation that ought to enter them; the voice of the PEOPLE against the government of the *state*. In the evening at the theatre (a tragedy) I was agreeably disappointed, to find that the Italians have something besides harlequin and punchinello.

NOVEMBER 1. The cheapness of Italy is remarkable, and puzzles me not a little to account for; yet it is a point of too much importance to be neglected. I have, at Petrillo's, a clean good room, that looks on the grand canal, and to the Rialto, which, by the way, is a fine arch, but an ugly bridge; an excellent bed, with neat furniture, very rare in Italian inns, for the bedstead is usually four forms, like trussels, set together; fine sheets, which I have not met with before in this country; and my dinner and supper provided at the old price of 8 *paoli* a-day, or 3s. 4d. including the chamber. I am very well served at dinner with many and good dishes, and some of them *solids*; two bottles of wine, neither good nor bad, but certainly cheap; for though they see I drink scarcely half of it in my negus at supper, yet a bottle is brought every night. I have been assured, by two or three persons, that the price at Venice, *à la mercantile*, is only 4 to 6 *paoli*; but I suppose they serve a foreigner better. To these 8 *paoli*, I add 6 more for a *gondola*;—breakfast 10 *soldi*; if I go to the opera, it adds 3 *paoli*;—thus, for 7s. 3d. a-day, a man lives at Venice, keeps his servant, his coach, and goes every night to a public entertainment. To dine well at a London coffee-house, with a pint of bad port, and a very poor dessert, costs as much as the whole day here. There is no question but a man may live better at Venice for 100l. a year, than at London for 500l.; and yet the difference of the price of the common necessities of life, such as bread, meat, &c. is trifling. Several causes contribute to this effect at Venice; its situation on the Adriatic, at the very extremity of civilized Europe, in the vicinity of many poor countries; the use of gondolas, instead of horses, is an article perhaps of equal importance. But the manners of the inhabitants, the modes of living, and the very moderate incomes of the mass of the people, have perhaps more weight than either of those causes. Luxury here takes a turn much more towards enjoyment, than consumption; the sobriety of the people does much, the nature of their food more; pastes, macaroni, and vegetables are much easier provided than beef and mutton. Cookery, as in France, enables them to spread a table for half the expence of an English one. If cheapness of living, *spectacles*, and pretty women, are a man's objects in fixing his residence, let him live at Venice: for myself, I think I would not be an inhabitant to be Doge, with the power of the Grand Turk. Brick and stone, and sky and water, and not a field or a bush even for fancy to pluck a rose from! My heart cannot expand in such a place:

a place: an admirable monument of human industry, but not a theatre for the feelings of a farmer!—Give me the fields, and let others take the tide of human life, at Charing-cross and Fleet-ditch*. Called again on Signore Arduino; converse on the state of agriculture in Italy, and the causes which have contributed to accelerate or retard it; and from him to a *conservatorio* at the Ospalletto. Dr. Burney, in his pleasing and elegant tour, has given an account of them.

The 2d. A tour among *Chiese, Scuole, e Palazzi*; but there is such an abundance of buildings and collections to which books send one, that much time is always lost. The only traveller's guide that would be worth a farthing, would be a *little* book that gave a catalogue of the best articles to be seen in every town, in the order of merit. So that if a man in passing have but one hour, he uses it in seeing the best object the place contains; if he have three days, he takes the best the three days will give him; and if he stay three months he may fill it with the like gradation; and what is of equal consequence, he may stop when he pleases and see no more; confident, as far as he has extended his view, that he has seen the objects that will pay him best for his attention. There is no such book, and so much the worse for travellers. In the library of St. Mark among the antiques, are Commodus, Augustus, and Adrian; and more particularly to be noted, a fallen gladiator: a singular and whimsical Leda, by Cocenius. In the Palazzo Barbarigo, the Venus and the Magdalen of Titian, are beautiful, though they have lost much of their glowing warmth by time. Two Rembrandts in the Palazzo Farsetti. A Holy Family, by Andrea del Sarto. Titian's portrait, by himself. I finished by going up St. Mark's tower, which is high enough to command a distinct view of all the islands on which Venice is built, and a great range of coast and mountains. The country seems every where a wood. Nothing rivals the view of the city and the isles. It is the most beautiful, and by far the most singular that I have seen. The breadth of the Giudecca canal, spread with ships and boats, and walled by many noble buildings, with the isles distinct from Venice, of which the eye takes in four-and-twenty, form, upon the whole, a *coup d'œil*, that exceeds probably every thing the world has to exhibit. The city, in general, has some beautiful features, but does not equal the idea I had formed of it, from the pictures of Canaletti. A poor old gothic house makes a fine figure on canals. The irregularity of front is greater perhaps than in any other city of equal importance; no where preserved for three houses together. You have a palace of three magnificent stories, and near it a hovel of one. Hence, there is not that species of magnificence which results from uniformity; or from an uninterrupted succes-

* See Mr. Boswell's agreeable Life of Dr. Johnson.

sion of considerable edifices. As to streets, properly so called, there is nothing similar to them in the world; twelve feet is a broad one; I measured the breadth of many that were only four and five. The greater part of the canals, which are here properly the streets, are so narrow, as to take off much from the beauty of the buildings that are upon them. St Mark's place has been called the finest square in Europe, which is a fine exaggeration. It appears large, because every other space is small. The buildings, however, that surround it are some of them fine; but they are more interesting than beautiful. This spot is the immediate seat and heart of one of the most celebrated republics that has existed. St. Mark's church, the Doge's palace, the library, the Doge himself, the nobles, the famous casinos, the coffee-houses: thus, St. Mark's square is the seat of government, of politics, and of intrigue. What Venice offers of power and pleasure, may be fought here; and you can use your legs commodiously no where else. Venice shines in churches, palaces, and one fine square; and the beauty of the large canals is great. What she wants are good common houses, that mark the wealth and ease of the people; instead of which, the major part are gothic, that seem almost as old as the republic. Of modern houses there are few—and of new ones fewer; a sure proof that the state is not flourishing. Take it, however, on the whole, and it is a most noble city; certainly the most singular to be met with in the world. The canal of the Giudecca, and the grand canal, are unrivalled in beauty and magnificence. Four great architects have contributed their talents for the fine buildings to be met with here;—Palladio, St. Micheli, Sanfovino, and Scamozzi. The church of St. Georgio Maggiore, by the first, is of a noble simplicity; and that of St. Maria della Saluta, by St. Micheli, has parts of admirable beauty; he seems always happy in his domes; and the portal of this church is truly elegant. If a genius were to arise at present at Venice, as great as Palladio, how would he find employment? The taste of building churches is over: the rich nobles have other ways of spending their incomes. Great edifices are usually raised by newly acquired fortunes; there are now either none, or too inconsiderable to decorate the city. In England, all animated vigour of exertion is among individuals, who aim much more at comfort within, than magnificence without; and for want of public spirit and police, a new city has arisen at London, built of baked mud and ashes, rather than bricks; without symmetry, or beauty, or duration; but distinguished by its cleanness, convenience, and arrangement. At a *prova*, or rehearsal of a new opera, *Il Burbero benefico*, by Martini of Vienna, much to my entertainment.

The 3d. To the arsenal, in which there is very little indeed worth the trouble of viewing; travellers have given strange exaggerations of it; the number of ships, frigates, and gallies is inconsiderable; and I came out of this famous arsenal, with a much meaner opinion of the Venetian naval force, than I
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had entered it. Yet *they say* there are 3000 men constantly employed: if there are half the number, what are they about? The armoury is well arranged, clean, and in good order. The famous *bucentaur* is a heavy, ill built, ugly gilded monster, with none of that light airy elegance which a decorated yacht has. A thing made for pleasure only, should have at least an agreeable physiognomy. I know nothing of the ceremony so good as Shenstone's stanza, comparing the vanity of the Doge's splendour on that day, with the real enjoyment which a hermit on her shore has of his ducal *cara sposa*. The ships in this arsenal, even of eighty-eight guns, are built under cover; and this is not so great an expence as might be thought; the buildings are only two thick brick walls, with a very light roof: but the expence is probably much more than saved in the duration of the ship. I mounted by the scaffolds, and entered one of eighty-eight guns, that has been twenty-five years building, and is not above four-fifths finished at present. At the opera.—The sex of Venice are undoubtedly of a distinguished beauty; their complexions are delicate, and, for want of rouge, the French think them pale; but it is not person, nor complexion, nor features, that are the characteristic; it is expression, and physiognomy; you recognize great sweetness of disposition, without that insipidity which is sometimes met with it; charms that carry a magic with them, formed for sensibility more than admiration; to make hearts feel much more than tongues speak. They must be generally beautiful here, or they would be hideous from their dress: the common one, at present, is a long cloth cloak, and a man's cocked hat. The round hat in England is rendered feminine by feathers and ribbons; but here, when the petticoats are concealed, you look again at a figure before you recognize the sex. The head-dresses I saw at Milan, Lodi, &c. shew the taste and fancy of this people. It is indeed their region; their productions in all the fine and elegant arts have shewn a fertility, a facility of invention, that surpasses every other nation; and if a reason be sought, for the want of energy of character with which the modern Italians have been reproached (perhaps unjustly) we may possibly find it in this exquisite taste—perhaps inconsistent in the same characters with those rougher and more rugged feelings, that result from tension, not laxity, of fibre. An exquisite sensibility has given them the empire of painting, sculpture, architecture, poetry, and music; whether or not to this it may be imputed that their beautiful country has been left under the dominion of Germans, Frenchmen, and Spaniards, is a question not difficult to decide.

The 4th. I am in double luck; two persons, to whom I had letters, are returned from the country. I waited upon one of them who received me in a very friendly manner, and entered into a conversation with me interesting, because on subjects of importance. I explained to him the object of my travels;

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and told him, that I resided a few days in great cities, for the advantage of conversation on those topics of political œconomy, which concerned the general welfare of all nations. He told me very frankly that he was no farmer, and therefore for the practical part of my enquiries could not say much: that as to the other objects, which were without doubt important, he would give me any information in his power. I said, that I wished for none on points which the nature of the government made improper to ask about; and if inadvertently I should demand any thing of that complexion, he would have the goodness to pardon and pass it by. He interrupted me hastily, “foreigners are strangely apt to entertain false ideas of this republic; and to think that the same principles govern it at present as are supposed to have been its guidance some centuries past. In all probability half of what you have heard about it is erroneous; you may converse as freely at Venice as at London; and the state is wise enough (for in such cases it is really very moderate and tender) to concern itself not at all with what does not tend directly to injure or disturb the established order of things. You have heard much of spies, and executions, and drownings, &c. but, believe me, there is not one circumstance at Venice that is not changed, and greatly too, even in twenty years.” Encouraged by this declaration, I ventured to put enquiries on population, revenues, taxes, liberty, &c. and on the government as influencing these; and it gave me no slight satisfaction to find that he was the man he had been represented;—able, keen, and intelligent; who had seen much of the world, and understood those topics perfectly. He was so obliging as to ask me to spend what time I could with him—said, that for some days he should be constantly at home; and whenever it suited me to come, he desired me to do it without ceremony. I was not equally fortunate with the other person; who seemed so little disposed to enter into conversation on any subject but trifles, that I presently saw he was not a man for me to be much the wiser for: in all political topics it was easy to suppose motives for silence; but relatively to points of agriculture, or rather the produce of estates, &c. perhaps his ignorance was the real cause of his reserve. In regard to *cicisbeism*, he was ready enough to chat; he said that foreigners were very illiberal in supposing that the custom was a mere cloak for vice and licentiousness; on the contrary, he contended, that at Paris, a city he knew well, there is just as much freedom of manners as at Venice. He said as much for the custom as it will bear; mollifying the features of the practice, but not removing them. We may however hope, that the ladies do not merit the scandal with which foreigners have loaded them; and that the beauty of some of them is joined with what Petrarch thought it so great an enemy to:

Due gran nemiché insieme erano aggiunte
Bellezza ed onestà——

At night to a new tragedy of Fayel, a translation from the French; well acted by Signore and Signora Belloni. It is a circumstance of criticism, amazing to my ears, that the Italian language should have been represented as wanting force and vigour, and proper only for effeminate subjects. It seems, on the contrary, as powerfully expressive of lofty and vigorous sentiments, of the terrible and the sublime, as it is admirable in breathing the softest notes of love and pity; it has even powers of harsh and rugged expression. There is nothing more striking in the manners of different nations, than in the idea of shame annexed to certain necessities of nature. In England a man makes water (if I may use such an expression) with a degree of privacy, and a woman never in sight of our sex. In France and Italy there is no such feeling, so that Sterne's Madame Rambouillet was no exaggeration. In Otahite, to eat in company is shameful and indecent; but there is no immodesty in performing the rites of love before as many spectators as chance may assemble. There is between the front row of chairs in the pit and the orchestra, in the Venetian theatre, a space of five or six feet without floor: a well dressed man, sitting almost under a row of ladies in the side boxes, stepped into this place, and made water with as much indifference as if he had been in the street; and nobody regarded him with any degree of wonder but myself. It is, however, a beastly trick: shame may be ideal, but not cleanliness; for the want of it is a solid and undoubted evil. For a city of not more than 150,000 people, Venice is wonderfully provided with theatres; there are seven; and all of them are said to be full in the carnival. The cheapness of admission, except at the serious opera, undoubtedly does much to fill them.

The 5th. Another tour among palaces, and churches, and pictures; one sees too many at once to have clear ideas. Called again on ———, and had another conversation with him better than a score of fine pictures. He made an observation on the goodness of the disposition of the common people at Venice, which deserves, in candour, to be noted: that there are several circumstances, which would have considerable effect in multiplying crimes, were the people disposed to commit them: 1st, the city is absolutely open, no walls, no gates, nor any way of preventing the escape of criminals by night, as well as by day:—2d, that the manner in which it is built, the narrowness and labyrinth-direction of the streets, with canals every where, offer great opportunities of concealment, as well as escape: 3d, the government never reclaims of any foreign power a criminal that flies: 4th, there is no police whatever; and it is an error to suppose that the system of *espionage* (much exaggerated) is so directed as to answer the purpose: 5th, for want of more commerce and manufactures, there are great numbers of idle loungers, who must find it difficult to live: 6th, and lastly, the government very seldom hangs, and it is exceedingly rare otherwise to punish.—From this union of circumstances it would be natural to suppose,

that rogues of all kinds would abound; yet that the contrary is the fact; and he assured me, he does not believe there is a city in Europe, of equal population, where there are fewer crimes, or attempts against the life, property, or peace of others: that he walks the streets at all hours in the night, and never with any sort of arms. The conclusion in favour of his countrymen is very fair; at the same time I must remark, that these very circumstances, which he produces to shew that crimes ought to abound, might, perhaps, with as much truth, be quoted as reasons for their not being found. From the want of punishment and police may probably be drawn an important conclusion, that mankind are always best when not too much governed; that a great deal may safely be left to themselves, to their own management, and to their own feelings; that law and regulation, necessary as they may be in some cases, are apt to be carried much too far; that frequent punishments rather harden than deter offenders; and that a maze of laws, for the preservation of the peace, with a swarm of magistrates to protect it, hath much stronger tendency to break than to secure it. It is fair to connect this circumstance of comparative freedom from crimes, with seven theatres for only 150,000 people; and the admission so cheap, that the lowest of the people frequent them; more, perhaps, in favour of theatrical representations than all that Rousseau's brilliant genius could say against them. At night to another theatre, that of the tragi-comedy, where a young actress, apparently not twenty, supported the principal serious part with such justness of action, without exaggeration; and spoke this charming language, with such a clear articulation and expression, as, for her age, was amazing.

The 6th. Another visit to islands and manufactures, &c.

The 7th. My last day at Venice; I made, therefore, a gleaning of some fights I had before neglected; and called once more on my friend — —, assuring him truly, that it would give me pleasure to see him in England, or to be of any service to him there. The *Corriere di Bologna*, a covered barge, the only conveyance, sets off to-night at eleven o'clock. I have taken my place, paid my money, and delivered my baggage; and as the quay from which the barge departs is conveniently near the opera-house, and *Il Burbero di buon Cuore* acted for the first night, I took my leave of Signore Petrillo's excellent inn, which deserves every commendation, and went to the opera. I found it equal to what the *prova* had indicated; it is an inimitable performance; not only abounding with many very pleasing airs, but the whole piece is agreeable, and does honour to the genius and taste of Signore Martini. Swift, in one of his letters to Stella, after dining with lords Oxford and Bolingbroke, and going in the evening to some scrub, says, he hates to be a prince and a scoundrel the same day. I had to-night all this feeling with a vengeance. From the representation of a pleasing and elegant performance, the music of which was well adapted

adapted to string one's feelings to a certain pitch, in clear unison with the pleasure that sparkled in so many eyes, and sounded from so many hands—I stepped at once, in full contrast, into the bark *Detto Corriere di Bologna*; a cabin about ten feet square, round which sat in silence, and the darkness visible of a wretched lamp, a company, whose rolling eyes examined, without one word of reception, each passenger that entered. The wind howled, and the rain beat in at the hole left for entering. My feelings, that thrilled during the evening, were dissipated in a moment, and the gloom of my bosom was soon in unison with that of the scene.

Of this voyage from Venice to Bologna, all the powers of language would fail me to give the idea I would wish to impress. The time I passed in it I rank among the most disagreeable days I ever experienced, and by a thousand degrees the worst since I left England; yet I had no choice: the roads are so infamously bad, or rather so impracticable, that there are no *vetturini*; even those whose fortune admits posting make this passage by water; and when I found that Mons. de la Lande, secretary to the French ambassador at Turin, had made the same journey, in the same conveyance, and yet in his book says not a word against the accommodation, how was I to have divined, that it could prove so execrable? A little more thought, however, would have told me that it was too cheap to be good, the price, for the whole voyage of 125 miles, is only 30 *paoli* (17s. 6d.) for which you are boarded. After a day's spitting of a dozen people, in ten feet square (enough to make a dog sick), mattresses are spread on the ground, and you rest on them as you can, packed almost like herrings in a barrel; they are then rolled up and tumbled under a bulk, without the least attention which side is given you the night after; add to this the odours of various sorts, easy to imagine. At dinner, the cabin is the kitchen, and the *padrone* the cook, he takes snuff, wipes his nose with his fingers, and the knife with his handkerchief), while he prepares the victuals, which he handles before you, till you are sick of the idea of eating. But, on changing the bark to one whose cabin was too small to admit any cookery, he brought his steaks and sausages, rolled up in a paper, and that in his flag of abomination (as Smollet calls a continental handkerchief), which he spread on his knees as he sat, opening the greasy treasure, for those to eat out of his lap with their fingers, whose stomachs could bear such a repast. Will an English reader believe that there were persons present who submitted, without a murmur, to such a voyage, and who were beyond the common mercantile crews one meets with in a *vettura*?—Some well dressed, with an appearance and conversation that betrayed nothing mean. I draw conclusions, operating strongly against the private and domestic comforts of life, from such public vehicles: this is the only one for those who pass to and from Venice, Bologna, Florence, Rome, and Naples,
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and of course must be exceedingly frequented; and there are no *voitures* by land to rival it. If these people were clean, decent, and comfortable at home, is it credible that they would submit to such a mode of travelling? The contrast would shock them as it would Englishmen, who would move heaven and earth to establish a better conveyance, at a higher price. The people who travel thus form the great mass of a nation, if we except the poor; it is of little consequence how the Cornari and the Morosini live; they live probably like great lords in other countries; but the public and national prosperity is intimately connected with the comforts and accommodations of the lower classes, which appear in Italy to be, on comparison with England, miserably inferior. Their excellencies, the *aristocrats* of Venice, do not travel thus; and as to *the people*, whether they go on their heads, or in the mud, is all one to the spirit of their government. For myself, I walked much of the journey, and especially on the banks of the Po, for the better view of that great river, now rendered immense by the late dreadful floods, which have deluged so much of the country. Along the banks, which are high dykes, raised many feet against its depredations, there are matted huts at every hundred or two hundred yards, with men stationed, called *guardia di po*, ready to assemble with their tools, at a moment's warning, in case of a breach; they have fires all night. Soldiers also make the rounds, night and day, to see that the men are at their stations,—and to give assistance if wanted. There is a known and curious piece of roguery, against which much of this caution is bent; the mischief of a breach is so great, that when the danger becomes very imminent, the farmers, in the night, cross the river in boats, in order to bore holes in the banks, to enable the water the easier to make a breach, that by giving it a direction contrary to that of their own lands, they may render themselves secure. For this reason, the guards permit no navigation, except by privileged barks, like the *corrieri*, firing at all others that are seen on the river. It is now an immense body of water, twice, and in some places perhaps even thrice as broad as the Thames at London. As to the face of the country, from the Lagunes to Ferrara, it is every where nearly the same as what I have so often described; whether grass or arable, laid out into rows of pollards, with vines trained to them, at various distances, but always near enough to give the whole the appearance of a wood, when viewed from the least distance. It does not seem to want people; towns and villages being numerous; and there are all the signs of a considerable navigation; every village being a port, with abundance of barges, barks, boats, &c. Coffee-houses remarkably abound in the Venetian dominions; at all towns, and even villages, where we passed, they are to be found, fortunately for me, as they were my resource, to make amends for the dirty fingers, and beastly handkerchief of our Signore Padrone. Before I entirely
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finish with Venice, I shall insert a few circumstances, with which I was favoured by an Italian, who resided some time in that city, and had abilities that would not allow me to doubt of his capacity, in forming a true estimate of any political circumstance, to which he directed his attention. His account of the principal nobility of the republic is such as would explain much more than I have seen or heard in their dominions. He says, "the education of the great is the disgrace of Venice. Men of the first families are not only ignorant to a degree shameful in so enlightened an age, but they are educated in a bad *ton*; with ill manners, from ideas that are suffered to be instilled by dependents, which do not quit them through life; fixing, from early habit, the taste for bad company; while a pernicious indulgence exempts them from all learning: that this is so general, and is so extensive in its influence, that, had the interior organization of this government been less admirable, it would, from this very cause, have mouldered to nothing long ago: that the pride, of which they are accused, is ascribable equally to bad company and to ignorance; the first gives them vague and improper ideas of their own importance, and the second inspires them with reserve, to conceal their want of that knowledge which others, and especially foreigners, possess: that the ill effects of this bad education will be seen more and more; the governments of Europe being at present infinitely more enlightened than in times past; and improved considerably even in the last twenty years. There is, of necessity, a struggle among all nations, emulous to make the greatest progress in useful knowledge, and to apply all knowledge to the most useful purposes; in such a period, therefore (he added), any people who are stationary, and more particularly any government that is so, will be outstripped in the great course by their competitors, and perhaps trampled on, like the monarchy of France, by those in whom *light* hath taken the place of *ignorance*." Pity that the richest blood in European veins should at present experience such an education!

Here are about forty families, unquestionably the most ancient in Europe. All other countries, except Venice, have been conquered, or over-run, or so destroyed, that the oldest families may be dated comparatively from only modern periods; he who looks back to a well defined ancestry, from the tenth and eleventh centuries, and who can thus trace his lineage seven or eight hundred years, is in every country respected for antiquity; of this standing are the families of Bourbon, d'Esté, Montmorency, Courtenaye, &c. which are commonly esteemed the first in Europe; but they are not esteemed so at Venice. Some of the Roman families, which, from the ravages of the Huns, took shelter in the isles of Venice, and which were THEN considerable enough to be entrusted with the government of their country, yet remain, and are unquestionably the most ancient in Europe. De la Lande, from Fresdrotti, confines the electors
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of the first Doge to twelve—*Badoer*, *Contarini*, *Morosini*, *Tiepolo*, *Michiel*, *Sanudo*, *Gradenigo*, *Memo*, *Falier*, *Dandolo*, *Barozzi*, and *Polano*, which is of late extinct. In the next class he places *Zustiniani*, *Cornaro*, *Bragadin*, and *Bembo*; then come the families *il ferrare del consiglio*, *Querini*, *Dolfini*, *Soranzo*, *Zorai*, *Marcello*, *Sagredo*, *Zane*, and *Salomon*. But since *Monf. de la Lande* wrote, they have published at Venice a *Dizionario storico di Tutte le Venete Patrizie Famiglie*, 1780; compiled from a MS. in St. Mark's library; this work does not accord with the preceding table; I have extracted from it the following list:

Badoer; sua origine con la repubblica.—*Bollani*; antichi tribuni.—*Bragadin*; nei piu rimoti secoli della repubblica.—*Celfi*; dagli antichi *Marj* di Roma, antichi tribuni.—*Cioran*; negli elettori del primo Doge.—*Contarini*; uno negli elettori del primo Doge.—*Cornaro*; dagli antichi *Corneli* di Roma, da' primissimi tempi tenuta in Venezia.—*Emo*; nacque colla medesima repubblica.—*Foscarini*; Vennero 867; antichi tribuni.—*Gradenigo*; delle prime venute in Venezia.—*Magno*; dalla prima fondazion di Venezia; tribuni.—*Marcello*; pare, che non si possa metter in dubbio, che questa famiglia discenda dagli antichi *Marcelli* di Roma; antichi tribuni.—*Michieli*; antichissima di Venezia; gli elettori del primo Doge.—*Mocenigo*; delle prime venute in Venezia.—*Molin*; stabilita in Venezia 877; antichi tribuni.—*Morosini*; rifugiti per le incurzioni di *Attila*; fra gli elettori del primo Doge, e antichi tribuni.—*Da Mosto*; Vennero 454 rifugiati per *Attila*.—*Nani*; Vennero in Venezia fin dalla prima sua fondazione; antichi tribuni.—*Orio*; rifugiati per *Attila*; antichi tribuni.—*Pisani*; dagli antichi *Pisani* di Roma; dell'antico consiglio.—*Querini*; elettori del primo Doge.—*Sagredo*; Vennero nel 485.—*Salomon*, trà le elettrici del primo Doge.—*Sanudo*, dei primi fondatori della città.—*Semitecolo*, fin dal 843; antico consiglio.—*Soranzo*, senza dubbio delle prime rifugite in Venezia; antichi tribuni.—*Tiepolo*, gli elettori del primo Doge: antichi tribuni.—*Trevisan*, Vennero per l'irruzione d'*Attila*.—*Valier*, rifugiti per le incursione di *Attila* fino dal 423; tribuni antichi.—*Venier*, Vennero per *Attila*; antichi tribuni.—*Zane*, antichissima famiglia di Venezia; antico consiglio.—*Zen*, dei 12 elettori del primo Doge. *Bembo*, *Coco*, *Dandolo*, *Falier*, *Foscari*, *Gritti*, *Malipiero*, *Marini*, *Minio*, *Minotto*, *Moro*, *Muazzo*, *Nadal*, *Resaro*, *Da Riva*, *Ruzini*, *Tron*, *Zusto*, all these antichi tribuni.

From the details of these families it appears, that many have an origin as old as *Attila* the Hun, who invaded Italy in 452. If all these families be allowed to date from that period (and no reason appears against it), their origin may be traced to more than 1300 years. The election, however, of the first Doge, in 697, by the twelve heads of the republic, is one of the most authentic and the most noted acts in the establishment of any government. To this undisputed origin the preceding list assigns the families of *Civran*, *Contarini*, *Michieli*, *Morosini*, *Querini*, *Salomon*, *Tiepolo*, and *Zen*, rejecting thus several

several families which have been commonly esteemed the first in the republic, and which former writers have expressly ranked among the electors of the first Doge. The only families in which both lists agree are Contarini, Michieli, Morosini, and Tiepolo: whether the others were, or were not, electors of the Doge, there is no question about their great antiquity; and it is equally certain, that there are now actually at Venice from forty to fifty families which, in point of antiquity well ascertained, exceed all that are to be found in the rest of Europe.

And here I take leave of the Venetian lion; I am tired of it:—if the state were to build a pig-stie, I believe they would decorate it with his figure. It is a beast of no merit;—for what is ferocity without humanity,—or courage without honour?—It wars only to destroy; and spreads its wings not to protect, but to cover, like the vulture of Mr. Sheridan, the prey that it devours. At Ferrara, the Padrone's business stopped him a whole day; but he pretended it was a want of oxen to draw the coaches, that carried us ten miles by land, from canal to canal. This was not amiss, for it enabled me to see every thing in that town, which, however, does not contain much. The new part—new in comparison with the rest, was built by Hercules II. Duke of Ferrara, who has laid out, and distributed the streets, and a square, in a manner that does honour to his memory. They are all of a fine breadth, well paved, with *trottoirs* of brick, every where defended by stone posts. I have seen no city so regularly laid out, except Turin. The Palazzo of the Marchese di Villa is an object to examine; and at that spot there is a very advantageous view of two noble streets. The Palazzo di Bentivoglio is another considerable building, with a vast garden, full of bad statues; and even some of footmen, with laced hats and shoulder-knots, in a style fully as ridiculous as M. du Barré's at Toulouze. In the cathedral, a fine Guercino; and a marriage of Cana, by Bonona, a Ferrarese painter, at the Chartreuse. I paid homage to the tomb of Ariosto, a genius of the first lustre; since all modern ages have produced but three distinguished epic poets, what a glory to Italy to have given birth to two of them! the wonder is greater, however, that the third was not of the same country. From Ferrara to the canal, which leads to Bologna, the road is, without any idea of comparison, the worst in Europe, that pretends to be *great* and *passable*. It is the natural rich soil of a flat wet country, rendered deeper by the late heavy rains; seven horses drew a coach about a mile and a half an hour. Making and mending are philosophical experiments not tried here; and the country being inclosed, the hedges and ditches confine the carriages to poach through the mud of one direction, instead of many. I walked for the most part in the adjoining fields, the better to examine them. Arrived at Bologna at twelve o'clock at night.

—125 miles.

The 12th. Deliver letters. I found Signore Bignami at home. He is a considerable merchant, who has attended to agriculture, sensible and intelligent. An English merchant, at the *Three Moors*, informing me, that Mr. Taylor, who was at Carlsruhe for some time, was now settled at Bologna, I determined to wait on him, being the gentleman of whose husbandry, at Bifrons in Kent, I gave an account in my Eastern Tour. I accordingly went, in the evening, to Mr. Taylor's *conversazione*. He has handsome apartments in the Palazzo Zampieri, and lives here agreeably with his beautiful and amiable family; a finer progeny of daughters and sons is hardly to be seen, or that forms a more pleasing society. As I did not know, till I got to Bologna, that Mr. Taylor had left the court of Carlsruhe, I was eager to hear why he had quitted a situation which was so congenial with his love of agriculture. This gentleman, travelling in Germany, became known to the Margrave of Baden, where that enthusiastic love of agriculture, which, for the good of mankind, some minds feel, induced him to take a farm of that prince. Thus was a gentleman, from the best cultivated part of Kent, fixed on a farm of five hundred acres in Germany. He carried his point, improved the farm, staid four years, and would have continued to the infinite advantage of the country, if the ministers of the Margrave had had as much understanding, and as liberal a mind as their master. I am inclined to believe that no man can succeed on the continent of Europe (unless under a prince with a character of such decided energy as the late King of Prussia) provided he be really *practical*. He has no chance if he be not well furnished with the rubbish which is found in academies and societies: give him a jargon of learning, the science of names and words, letting things and practice go elsewhere, and he will then make his way, and be looked up to. To the opera, where there is nothing worth hearing or seeing, except only a young singer, Signora Nava, whose voice is one of the clearest and sweetest tones I ever heard; she has great powers, and will have, for she is very young, great expression. It was the *Teodoro rè di Corsica* of Paiesello.

The 13th. The *Pellegrino* and *St. Marco* being full, has fixed me in this brutal hole, *I Tre Maurretti*, which is the only execrable inn I have been in (in a city) since I entered Italy. It has every circumstance that can render it detestable; dirt, negligence, filth, vermin, and impudence. You sit, walk, eat, drink, and sleep with equal inconvenience. A tour among the palaces and churches. The great collection of paintings in the Zampieri palace contains a few pieces of such exquisite merit, that they rivet the spectator by admiration. The St. Peter, of Guido; the Hagar, of Guercino; and the Dance, of Albano. Monf. Cochin says, the Guido is not only a *chef d'œuvre*, but the finest picture in Italy, *enfin c'est un chef d'œuvre & le tableau le plus parfait, par la re*
union

union de toutes les parties de la peinture qui soit en Italie. It is certainly a most noble piece of two figures, but wants, of necessity, the poetry of a tale told by many. To please me, the Guercino, of which he says little more than its being *très beau*, has an expression delicious, that works on a fine subject to a great effect: it is more nature than painting. Hagar's countenance speaks a language that touches the heart; and the pathetic simplicity of the child is in unison with all the mother's feelings. The mellow warmth and tender softness of the colouring of the Albano, with the sweetness of the expression, are inimitable. In the church of St. Giovanne in Monte, there is the famous St. Cecilia of Raphael, of which Sir Robert Strange has given so fine a print, and in which he has done ample justice to the original. The St. Agnes of Domenichino, in the church of that name, and Job on his throne, by Guido, at the Mendicanti, are two others that must be visited. Dine with Signore Bignami; he is a considerable merchant, and therefore I need not stare at this hospitality in Italy; with great satisfaction I find that no minute is lost in his company, as he is obliging enough to pardon the number of my enquiries. In the evening to Mr. Taylor's; this gentleman's discourse is interesting to my pursuit, for he has always had a great predilection for agriculture, and has practised it with intelligence and success. The Marchese di Mareschotti, who is married to a very pretty English lady, present also; a sensible man, who seemed pleased with the opportunity of explaining to me several circumstances, relative to tythes and taxation, that I was enquiring into. He is a singular instance at Bologna, of going into company with his wife, and consequently superseding the necessity or want of a *cicisbeo*. He is regarded by his countrymen for this, pretty much as he would be if he walked on his head, instead of his feet. How strangely doth it appear to them, that an Italian nobleman should prefer the company of a woman he married from affection, and think there is any pleasure when he embraces his children, in believing them his own!—Here I met also the Baron de Rovrure, a French nobleman, and Madame la Marquise de Bouille, both in their way to Naples; they seem agreeable people. Mr. Taylor, and his two charming daughters, have apparently a pleasing society here. These ladies speak French and German like natives, and before they leave Italy will do the same with Italian; they paint agreeably, and have considerable musical talents; thus accomplishments will not be wanted to second the graces they owe to the beneficence of nature. I had some information from Miss Taylor, to-night, relative to the expences of housekeeping, which will give an idea of the cheapness of Italy; premising (of which more in another place) that the *paolo* is sixpence, and that there are 10 *baiocchi* in it. As to beef, mutton, bread, &c. they are all over Europe too nearly on a par to demand much attention; where meat is very fine, it is *nominally* dear; and where it is bad, it is called cheap:

but the difference deserves little notice. Mr. Taylor contracts with a *traiteur* for his table, nine in the parlour and five in the kitchen, 20 *paoli* a-day for dinner; for supper he pays extra, and is supplied to his satisfaction—a proof, if any be wanted, of the cheapness of Bologna. It is remarkable, that there is not the difference between the prices of any of the articles, and the same thing in England, that there is between the contracting prices, and the *ratio* with us, a few per cent. in the former, but some hundred per cent. in the latter; a sure proof that dearness and cheapness of living does not depend on prices per pound, but on the modes of living. Every tavern-keeper, *traiteur*, or other contractor of any sort in England, will have a price that shall give him a fortune in a few years; and servants, instead of submitting to the œconomy which their masters may think it necessary to establish, will not live an hour with them if they are not permitted to devour them.

The 14th. With Signore Bignami and his family, to his country seat, about five miles from Bologna, on the road to Pistoia; spend an agreeable day, entirely dedicated to farming. The house is handsome, and finely situated: the entertainment truly hospitable, and the information, given in a cool considerate walk, through every field of the farm, such as is little liable to error. A circumstance at this country seat deserves noting, as it marks the abundance of thieves: the chambers had the windows all shut so close, and fastened with so much attention, that I enquired the reason; and was answered, that if the greatest care be not taken, thieves will break in, and plunder a house of every thing portable. The shutters, to both windows and doors, were inlaid with bars of iron, to prevent their being sawn through. The conclusion we must draw from such a circumstance is certainly little favourable, at first sight, to the lower classes—but that is always unjust, for they are ever what the police, law, and government of a country make them. In the evening, again at Mr. Taylor's; a house, in which no one will have the *entré*, and want the inclination. The Marchese Mareschotti there, who had the goodness to continue his attentions to my enquiries, and to give me some valuable information: I had also the pleasure of conversing, on the same subjects, with the Conte di Aldrovandi.

There is a room, at the *Tre Maurretti*, which, communicating with several apartments, the guests have it in common: among them was a young *Ballerina*, waiting here for an Englishman, to attend her to Venice; she was pretty and communicative; had some expensive trinkets given her, to the amount of a considerable sum, by her lover, who proved (for secrecy was not among her qualities) to be a rider, as we should call him, to a manufacturing house in England. An Italian merchant present remarked, that the profit of the English, on their manufactures, must be enormous, or they could not support *commissarii* at such

an expence, some of whom travel in Italy *post*, from town to town, and, when arrived, amuse themselves, it is plain, with such *comforts* as the good humour of the country throws in their way.

The 15th. The rencontre at Mr. Taylor's of the French gentleman, the Baron de Rovrure, and Madame de Bouille, has been productive of an engagement to travel together to Florence, with Signore Grimaldi, and Mr. Stewart, a Scotch gentleman*, just arrived from Geneva, and going also to Florence. We set off in three *vetture* this morning. The country from Bologna to Florence is all mountainous; most of it poor and barren, with shabby, ragged, ill preserved wood, spotted with a weak and straggling cultivation. Houses are scattered over most of it, but very thinly. We dined at Loiano, much in the style of hogs; they spread for us a cloth, that had lost, by the snuff and greasy fingers of *vetturini*, all that once was white; our repast was black rice broth, that would not have disgraced the philosophy of Lycurgus, liver fried in rancid oil, and cold cabbage, the remnant of the preceding day. We pleaded hard for sausage, eggs, or good bread and onions, but in vain. We laid, not slept, in our cloaths at Covigliano, hoping, not without fears, to escape the itch. Such accommodations, on such a road, are really incredible. It is certainly one of the most frequented that is to be found in Europe. Whether you go to Florence, Rome, and Naples, by Parma, Milan, or Venice; that is, from all Lombardy, as well as from France, Spain, England, Germany, and all the north, you pass by this route, consequently one would expect, at every post, a tolerably good inn, to catch the persons whom accident, business, or any other derangement of plan might induce to stop between Bologna and Florence. The only place possible to sleep at, with comfort, is Maschere, about forty miles from Bologna, but, for travellers who go any other way than post, forty miles are no division of sixty-four. If the road were in England, with a tenth of the traffic, there would be an excellent inn at every four or five miles, to receive travellers properly, at whatever distance their accidental departure made most convenient: but England and Italy have a gulph between them in the *comforts* of life, much wider than the channel that parts Dover and Calais.—27 miles.

The 16th. On entering Tuscany, our baggage was examined, and plumbed for Florence; the first moment I set foot in this country, therefore, I find one gross error of the *œconomistes*, who have repeated, from one another, in at least twenty performances, that the Grand Duke had adopted their plan, and united all taxes in one, upon the net produce of land. Having crossed the highest ridge of the Appenines, for several miles in the clouds, and therefore seeing no prospect, descended at Maschere, for a while, in a better region; from the inn, the view is rich and fine. We noted here a wonderful improvement in the figure

* Travelling with a young gentleman, a Mr. Kinloch.

and beauty of the sex; the countrywomen are handsome, and their dress is very becoming; with jackets, the sleeves puckered and tied in puffs, with coloured ribbons; broad hats, something like those worn by ladies in England with riding habits; their complexions are good, and their eyes fine, large, and expressive. We reached Florence, with just light enough to admire the number of white houses spread thickly every where over the mountains that surround the city. But before we enter, I must say a word or two of my French fellow travellers: *Monf. le Baron* is an agreeable polite man, not deficient in the power to make observations that become a person of sense: the life of *Madame de Bouille* would, if well written, form an entertaining romance; she went, early in the last war, to *St. Domingo* with her husband, who had a considerable property there; and on her return she was taken in a French frigate, by an English one, after a very smart engagement of three hours, and carried into *Kinsale*, whence she went to *Dublin*, and to *London*: this is an outline which she has filled up very agreeably with many incidents, which have kept her in perpetual motion; the present troubles in France have, I suppose, added her and the Baron to the infinite number of other French travellers, who swarm, to an incredible degree, every where in Italy. She is lively, has much conversation, has seen a good deal of the world, and makes an agreeable *compagnon de voyage*.
 —37 miles.

The 17th. Last night, on arriving here, we found the *Aquila Nera* and *Vanni's* so full, that we could not get chambers; and the great Mr. Meggot looked into our cabriolets to examine us, before he would give an answer, pretending, that his were bespoken; and then assured us, as we had no air that promised good plucking, that his were engaged. At the *Scudi di Francia*, where there are many excellent and well furnished apartments, we found all we wanted, but dearer than common, 10 *paoli* a head a day; our merchant leaves us to-morrow morning, for *Leghorn*, and the rest of the company divide, to find lodgings. Waited on *Monf. de Streinesberg*, the Grand Duke's private secretary, for whom I had letters: I am out of luck, for he is immersed in business and engagements, as the court goes to *Pisa* to-morrow morning, for the winter. This, I suppose, is of no consequence to me, for what court is there in the world that would give or receive information from a farmer? The objects for which I travel are of another complexion from those which smooth our paths in a court. And yet the Grand Duke has the reputation of being, in respect to the objects of his attention, the wisest prince in Europe. So much for the sovereign of this country—let me but find some good farmers in it, and I shall not be discontented.

The 18th. Fixed this morning in lodgings (*del Sarte Inglese via dei Fossi*), with the Marchioness, the Baron, and Mr. Stewart. My friend, Professor Symonds,

monds, had given me a letter to his Excellency Philipppo Neri, who I found was dead; but hearing that his brother, Signore Neri, was not only living, but president of the *Georgofili* Society, I waited on him, and gave him the letter that was designed for his late brother; he received me politely, and recollecting the name of Young, being quoted by the Marquis de Cassaux, in his *Mechanism des Societes*, and being informed that I was the person, remarked, that this ingenious writer had made some use of my calculations, to found his theory of the national debt of England; a very curious subject, on which he should like much to converse with me; and asked, if I looked upon that debt as so harmless? I told him, that I thought Monf. de Cassaux's book full of original and ingenious remarks, and many important ones, particularly his condemnation of the colonizing system; but that as to the national debt of England, it originated in the knavery of those who borrowed, and in the folly of those who lent; perpetuating taxes that took money from industrious people, in order to give it to idle ones. That the liberty of England enabled it to flourish beyond that of any other society in the world, not because it had a national debt, but in spite of so great an evil.—*Well, Sir*, he replied, *I have just the idea of it that you have, and I could not conceive how a country could pay eight or nine millions of guineas a year, in interest, without being the weaker and poorer.* He then enquired into my plan, commended highly the object of my journey, which, he was pleased to say, had so little resemblance to that of the great mass of my countrymen, that he hoped I met with no impediments in gaining the information I wished; and added, that he was very sorry he was going to Pisa, or he should have been happy in procuring me all in his power, though he was no practical farmer. Signore Neri appears to be well informed, sensible, and judicious; has a large collection of books, on useful subjects, particularly the various branches of political œconomy, which he shews, by his conversation, to have consulted with effect.

After all I had read and heard of the Venus of Medicis, and the numberless casts I had seen of it, which have made me often wonder at descriptions of the original, I was eager to hurry to the *tribuna*, for a view of the dangerous goddess. It is not easy to speak of such divine beauty, with any sobriety of language; nor without hyperbole to express one's admiration, when felt with any degree of enthusiasm; and who but must feel admiration at the talents of the artist, that thus almost animated marble? If we suppose an original, beautiful as this statue, and doubly animated, not with life only, but with a passion for some favoured lover, the marble of Cleomenes is not more inferior to such life, in the eyes of such a lover, than all the casts I have seen of this celebrated statue are to the inimitable original. You may view it till the unsteady eye doubts the truth of its own sensation: the cold marble seems to acquire the warmth of
nature,

nature, and promises to yield to the impression of one's hand. Nothing in painting so miraculous as this. A sure proof of the rare merit of this wonderful production is, its exceeding, in truth of representation, every idea which is previously formed; the reality of the chissel goes beyond the expectancy of imagination; the visions of the fancy may play in fields of creation, may people them with nymphs of more than human beauty; but to imagine life thus to be fashioned from stone; that the imitation shall exceed, in perfection, all that *common* nature has to offer, is beyond the compass of what ordinary minds have a power of conceiving. In the same apartment there are other statues, but, in the presence of Venus, who is it that can regard them? They are, however, some of the finest in the world, and must be reserved for another day. Among the pictures, which indeed form a noble collection, my eyes were rivetted on the portrait of Julius II. by Raphael, which, if I possessed, I would not give for the St. John, the favourite idea he repeated so often. The colours have, in this piece, given more life to canvases, than northern eyes have been accustomed to acknowledge. But the Titian!—enough of Venus;—at the same moment to animate marble, and breathe on canvases, is too much.—By husbanding the luxury of the sight, let us keep the eye from being satiated with such a parade of charms: retire to repose on the insipidity of common objects, and return another day, to gaze with fresh admiration. In the afternoon, by appointment, to Signore Preposito Lastri, author of the *Corso d'Agricoltura*, and other much esteemed works, to whom I had letters. He was to have carried me to Signore Zucchini, director of the æconomical garden, for whom also I had recommendations; I hoped to escape seeing this garden—and the rain seconded my wishes, for it would not allow us to stir; and that gentleman coming to Signore Lastri's, I had the pleasure of a conversation on our favourite topic. Signore Zucchini seems an animated character, speaks of agriculture in a style that gives me a good opinion of his pursuits; made me very friendly offers of whatever assistance was in his power, during my stay at Florence, and appointed another day for viewing the æconomical garden. At night to the opera, the *Trame del Luffo*, of Cimarosa; the music as good as the singing bad, and the dancing execrable. An English gentleman, of the name of Harrington (the younger), whom I had met at Mr. Taylor's, at Bologna, entering into conversation, mentioned, among other topics, that the Margrave of Anspach, who is here with Lady Craven, wished to know me personally, in order to speak to me on the subject of Spanish sheep, his highness having imported them to Anspach. I replied, that, on a farming topic, I should be happy in the conversation of any prince, who loved the subject enough to import a better breed. The father soon after joining us, and probably having been told, by his son, what had passed, observed to me, that the Margrave was very fond of agriculture, and
had

The 19th. Call on Signore Tartini, secretary to the royal academy *Georgofili*, and on Lord Hervey, our minister here; both absent. Another turn in the gallery brought a repetition of that pleasure which is there to be reaped, in the exuberance of a plentiful harvest. The woman, lying on a bed, by Titian, is probably the finest picture, of one figure, that is to be seen in the world. A satyre and nymph, by Hannibal Carracci; a Correggio; a Carlo Dolci.—Among the statues—the Apollo, the Wrestlers, the Whetter, as it is called, the Venus rising from the bath, the Ganimede.—What an amazing collection! I have been many years amusing myself with looking at the statues in England! very harmlessly:—my pleasure of that kind is at end. In spite of every effort to the contrary, one cannot (unless an artist, who views not for pleasure but as a critic) help forming eternal comparisons, and viewing very coldly pieces that may perhaps have merit, but are inferior to others which have made a deep impression. But the paintings and statues in this gallery are in such profusion, that, to view them with an attention adequate to their merit, one ought to walk here two hours a day for six months. In the afternoon, waited on Signore Fabbroni, author of some works on agriculture, that have rendered him very well known, particularly a little treatise in French, entitled, *Reflexions sur l'état actuel de l'Agriculture*, printed at Paris in 1780, which is one of the best applications of the modern discoveries in natural philosophy to agriculture, that has been attempted; it is a work of considerable merit. I had two hours very agreeable and instructive conversation with him: he is lively, has great fire and vivacity, and that valuable talent of thinking for himself, one of the best qualities a man can possess; without which, we are little better than horses in a team, trammelled to follow one another. He is very well instructed also in the politics of Tuscany, connected with agriculture.

K k encouragement.

encouragement. He accompanied me to Signore Lastrì's, and then we went together to the œconomical garden of Signore Zucchini, for which the Grand Duke allows three hundred crowns a-year, besides such labour as is wanted; and the professor reads lectures in summer. The establishment of such a garden does honour to a sovereign; because it marks an attention to objects of importance. But it is greatly to be regretted they do not go one step further, and, instead of a garden, have a farm of not less than three hundred English acres; most of them are possessors of farms; a well situated one might easily be chosen, and the whole conducted at an expence that would be amply repaid by the practical benefits flowing from it. Signore Zucchini's garden is much cleaner, and in neater order than any other I have seen in Italy: but it is not easy to form experiments in a few acres, that are applicable to the improvement of a national agriculture. He is an active, animated character, attached to the pursuit (no small merit in Italy), and would make a very good use of his time, if the Grand Duke would do with him as the King of Naples has done by his friend Signore Balsamo—send him to practise in England. I told him so, and he liked the idea very much. We had some conversation concerning Signore Balsamo, agreeing that he had considerable talents, and great vivacity of character. I regretted that he was to stay only a year in England; but admitted, that there were few men who could make so good a use of so short a period. Signore Zucchini shewed me the MS. account of my farm, which Signore Balsamo had sent him*. A professor of agriculture in Sicily, being sent by his sovereign, and wisely sent, to England for instruction in agriculture, appears to me to be an epoch in the history of the human mind. From that island, the most celebrated of all antiquity for fruitfulness and cultivation, on whose exuberance its neighbours depended for their bread—and whose practice the greatest nations considered as the most worthy of imitation: at a period too when we were in the woods, contemned for barbarity, and hardly considered as worth the trouble of conquering. What has effected so enormous a change? Two words explain it, we are become free, and Sicily enslaved. We were joined, at the garden, by my good friend from Milan, the Abbate Amoretti, a new circumstance of good fortune for me. To-day, in my walk in the gallery, I had some conversation with Signore Adamo Fabbroni, brother of the gentleman I mentioned before, and author also of some dissertations on agriculture; particularly *Sopra il quesito, indicare le vere teorie delle fime dei terreni*, from which I inserted an extract in the Annals of Agriculture,—also a Journal of Agriculture, published at Perugia, where he resided seven years; but as it did not succeed for more than three, he dropped it. It is remarkable how many writers on this subject there are at present at Florence: the two Fabbronis, Lastrì, Zucchini, Targioni, Paoletti, whom I am to visit in the country, attended by Signore Amoretti;

* I fixed him in my neighbourhood in Suffolk.

they say he is the most practical of all, having resided constantly on his farm. I spent an hour very agreeably, contemplating one statue to-day, namely, Bandinelli's copy of the Laocoon, which is a production that does honour to modern ages; I did not want this copy to remind me of another most celebrated one, and of the many very agreeable and instructive hours I have spent with its noble owner the Earl of Orford.

The 21st. Signore Tartini had engaged the Abbate Amoretti, and myself, to go this day to his country-seat, but it rained incessantly. The climate of Italy is such as will not make many men in love with it; on my conscience, I think that of England infinitely preferable.—If there were not great powers of evaporation, it would be uninhabitable. It has rained, more or less, for five weeks past; and more, I should conceive, has fallen, than in England in a year. In the evening to the *conversazione* of Signore Fabbroni, where I met Signore Pella, director of the gallery; Signore Gaetano Rinaldi, director of the posts; another gentleman, administrator of the Grand Duke's domains, I forget his name; the Abbate Amoretti, &c.—It gave me pleasure to find, that the company did not assemble in order to converse on the trivial nonsense of common topics, like so many *coteries* in all countries. They very readily joined in the discussions I had with Signore Fabbroni; and Signora Fabbroni herself, who has an excellent understanding, did the same. By the way, this lady is young, handsome, and well made: if Titian were alive, he might form from her a Venus not inferior to those he has immortalized on his canvasses; for it is evident, that his originals were real, and not ideal beauty. Signora Fabbroni is here, but where is Titian to be found?

The 22d. In the forenoon to the *conversazione* of the senator Marchese Ginori, where were assembled some of the *letterati*, &c. of Florence; the Cavaliere Fontana, so well known in England for his eudiometrical experiments, Zucchino, Lastri, Amoretti, the Marchese Pacci, who has a reputation here for his knowledge of rural affairs, Signore Pella, &c. The *conversazioni* are commonly in an evening, but the Marchese Ginori's is regularly once a week in a morning; this nobleman received me very politely: indeed he is famous for his attention to every object that is really of importance; converses rationally on agriculture, and has himself, many years ago, established, in the neighbourhood of Florence, one of the most considerable manufactories of porcelain that is to be found in Italy. Dine with his Majesty's envoy extraordinary, Lord Hervey, with a great party of English; among whom were Lord and Lady Elcho, and Mr. and Miss Charteris, Lord Hume, Mr. and Mrs. Beckford, Mr. Digby, Mr. Tempest, Dr. Cleghorn, professor of history at St. Andrew's, who travels with Lord Hume, with ten or a dozen others. I had the honour of being known to Lord and Lady Hervey in Suffolk, so they were not new faces to me; of the others, I

had never seen any thing : the company was too numerous for a conversation, from which much was to be gained. I sat by the fellow of an English college ; and my heels had more conversation with his sword than I had with its owner : when a man begins every sentence with a cardinal, a prince, or a celebrated beauty, I generally find myself in too good company ; but Miss Charteris, who seems a natural character, and was at her ease, consoled me on the other side. At this dinner (which, by the way, was a splendid one), I was, according to a custom that rarely fails, the worst dressed man in the company ; but I was clean, and as quietly in repose on that head, as if I had been either fine or elegant. The time was, when this single circumstance would have made me out of countenance, and uneasy. Thank my stars, I have buried that folly. I have but a poor opinion of Quin, for declaring that he could not afford to go plain : he was rich enough, in wit, to have worn his breeches on his head, if he had pleased ; but a man like myself, without the talent of conversation, before he has well arranged his feelings, finds relief in a good coat or a diamond ring. Lord Hervey, in the most friendly manner, desired I would make his table my own, while I was at Florence,—that I should always find a cover, at three o'clock, *for dinners are not the custom here, and you will very rarely find me from home.* This explains the Florentine mode of living ; at Milan, great dinners are perpetual, here the nobility never give them. I have no idea of a society worth a farthing, where it is not the custom to dine with one another. Their *conversazioni* are good ideas, when there are no cards,—but much inferior to what one has at a dinner for a select party. In England, without this, there would be no conversation ; and the French custom, of rising immediately after it, which is that also of Italy, destroys, relatively to this object, the best hour in the whole day.

The 23d. To the gallery, where the horrible tale of Niobe and her children is told so terribly well in stone, as to raise in the spectator's bosom all the powers of the pathetic. The action of the miserable mother, shielding the last of her children against the murdering shafts of Apollo, is inimitable ; and the figure of that youngest of the children, perfection. The two figures, which strike me most, are the son who has gathered his drapery on his left arm, and the companion, a daughter, in the opposite corner. The expression of his face is in the highest perfection, and the attitude, and whole figure, though much repaired, incomparable. The daughter has gathered her drapery in one hand, behind her, to accelerate her flight ; she moves against the wind, and nothing can be finer than the position and motion of the body, appearing through the drapery. There are others of the group also, of the greatest force and fire of attitude ; and I am happy not to be a critic instructed enough to find, as Monf. de la Lande says, that the greatest part of the figures are bad. They certainly
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are not equal; they are the work of Scopas, a Greek sculptor. Dine with Lord Elcho, at Meggot's hotel; Lord Hume, Mr. Tempest, Mr. Tyrrhit, as well as Lord Elcho's family and Dr. Cleghorn, present: some agreeable conversation; the young persons have engaged in sport to walk on foot to Rome; right—I like that. If the Italians be curious in novelty of character, the passing English are well framed to give it.

The 24th. In the morning, with Abbate Amoretti, and Signore Zucchini to the porcelain manufacture of the Marchese Ginori, four miles to the north of Florence. It is said to be in a flourishing state, and the appearance of things answers the description. It is a good fabric, and many of the forms and the designs are elegant. They work casts of all the antique statues and bronzes, some of which are well executed. Their plates are a *zecchin* each (9s.) and a complete service, for twelve covers, 107 *zechins*. To the Marchese Martelli's villa; a very handsome residence. This nobleman is a friend of Signore Zucchini, and, understanding our intention, of making it a farming day as well as a manufacturing one, ordered a dinner to be prepared, and his factor to attend for giving information, apologizing for his own absence, on account of a previous engagement. We found a very handsome repast; too much for the occasion:—and we drank—*alla Inglese*, SUCCESS TO THE PLOUGH! in excellent wine. The factor then conducted us over the farm: he is an intelligent man, and answered my numerous enquiries, apparently with considerable knowledge of the subject. Returned at night to Florence.

The 25th. Early in the morning, with Signore Amoretti, to Villa Magna, seven miles to the south of Florence, to Signore Paoletti; this gentleman, *cure* of that parish, had been mentioned to me as the most practical writer on agriculture, in this part of Italy, having resided always in the country, and with the reputation of being an excellent farmer. We found him at home, and passed a very instructive day, viewing his farm, and receiving much information. But I must note, that to this expression, *farm*, must not be annexed the English idea; for Signore Paoletti's consists of three *poderi*, that is, of three houses, each with a farmer and his family, *alla metà*, who cultivate the ground, and have half the produce. It is unnecessary to observe, that whenever this is the case, the common husbandry, good or bad, must be pursued. It will surprise my English readers to find, that the most practical writer at Florence, of great reputation, and very deservedly so, has no other than a *metayer* farm. But let it not be thought the least reflection on Signore Paoletti, since he classes, in this respect, with his sovereign, whose farms are in the same regimen. Signore Paoletti's maples for vines appeared to be trained with much more attention than common in Tuscany, and his olives were in good order. This day has given me a specimen of the winter climate of Italy; I never felt such a cold pierc-

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ing wind in England. Some snow fell; and I could scarcely keep myself from freezing, by walking four or five miles an hour. All water, not in motion from its current or the wind, was ice; and the icicles, from the dripping springs in the hills, were two feet long. In England, when a fierce N. E. wind blows in a sharp frost, we have such weather; but, for the month of November, I believe such a day has not been felt in England since its creation. The provision of the Florentines against such weather is truly ridiculous: they have not chimnies in more than half the rooms of common houses; and those they do not use; not because they are not cold, for they go shivering about, with chattering teeth, with an idea of warmth, from a few wood ashes or embers in an earthen pan; and another contrivance for their feet to rest upon. Wood is very dear, therefore this miserable succedaneum is for œconomy. Thank God for the coal fires of England, with a climate less severe by half than that of Italy! I would have all nations love their country; but there are few more worthy of such affection than our BLESSED ISLE, from which no one will ever travel, but to return with feelings fresh strung for pleasure, and a capacity renovated by a thousand comparisons for the enjoyment of it.

The 26th. To the Palazzo Pitti. I have often read about ideal grace in painting, which I never well comprehended, till I saw the Madonna della Sedia of Raphael. I do not think either of the two figures, but particularly the child, is strictly in nature; yet there is something that goes apparently beyond it in their expression; and as passion and emotion are out of the question, it is to be resolved into ideal grace. The air of the virgin's head, and the language of the infant's eyes, are not easily transfused by copyists. A group of four men at a table, by Rubens, which, for force and vigour of the expression of nature, is admirable. A portrait of Paul III. by Titian, and of a Medicis, by Raphael. A virgin, Jesus, and St. John, by Rubens, in which the expression of the children is hardly credible. A Magdalen, and portrait of a woman in a scarlet habit, by Titian. A copy of Corregio's holy family, at Parma, by Barrocio Cataline, a copy of Salvator Rosa, by Nicolo Cassalve; and last, not least, a marine view, by Salvator.—But to enumerate such a vast profusion of fine pieces, in so many splendid apartments, is impossible; for few sovereigns have a finer palace, or better furnished. Tables inlaid, and curiosities, both here and at the gallery, abound, that deserve examination, to mark the perfection to which these arts have been carried, in a country where you do not find, in common life, a door to open without wounding your knuckles, or a window that shuts well enough to exclude the Appenine snows. The gardens of this palace contain ground that Brown would have made delicious, and many fine things that itineraries, guides, and travels dwell amply on.

The 27th. To the palace Poggio Imperiale, a country-seat of the Grand Duke's, only a mile from Florence, which is an excellent house, of good and well

well proportioned rooms, neatly fitted up and furnished, with an air of comfort without magnificence, except in the article beds, which are below par. There is a fine vestibule and saloon, that, in hot weather, must be very pleasant; but our party were frozen through all the house. Lord Hervey's rooms are warm, from carpets and good fires; but those are the only ones I have seen here. We have a fine clear blue sky and a bright sun, with a sharp frost and a cutting N. E. wind, that brings all the snow of the Alps, of Hungary, Poland, Russia, and the frozen ocean to one's sensation. You have a sun that excites perspiration, if you move fast; and a wind that drives ice and snow to your vitals. And this is Italy, celebrated by so many hasty writers for its delicious climate! To-day, on returning home, we met many carts loaded with ice, which I found, upon measure, to be four inches thick; and we are here between latitude 43, and 44. The green pease in December and January, in Spain, shew plainly the superiority of that climate, which is in the same latitude. The magnitude and substantial solidity with which the Palazzo Ricardi was built, by a merchant of the Florentine republic, is astonishing; we have, in the north of Europe (now the most commercial part of the globe), no idea of merchants being able to raise such edifices as these. The Palazzo Pitti was another instance; but as it ruined its master, it deserves not to be mentioned in this view; and there are at Florence many others, with such a profusion of churches, that they mark out the same marvellous influx of wealth, arising from trade. To a mind that has the least turn after philosophical enquiry, reading modern history is generally the most tormenting employment that a man can have; one is plagued with the actions of a detestable set of men, called conquerors, heroes, and great generals; and we wade through pages loaded with military details; but when you want to know the progress of agriculture, of commerce, and industry, their effect in different ages and nations on each other—the wealth that resulted—the division of that wealth—its employment—and the manners it produced—all is a blank. Voltaire set an example, but how has it been followed? Here is a ceiling of a noble saloon, painted by Luca Giordano, representing the progress of human life. The invention and poetry of this piece are great, and the execution such as must please every one. The library is rich; I was particularly struck with one of the rooms that contains the books, having a gallery for the convenience of reaching them, without any disagreeable effect to the eye. In England we have many apartments, the beauty of which is ruined by these galleries: this is thirty-six feet by twenty-four, within the cases, well lighted by one moderate window; and is so pleasing a room, that if I were to build a library, I would imitate it exactly. After visiting the gallery, and the Palazzo Pitti, we are naturally nice and fastidious,—yet in the Palazzo Ricardi are some paintings that may be viewed with pleasure. In the evening to the *conversazione* of Signore Fabbroni; the assembly

bly merits the name ; for some of the best instructed people at Florence meet there, and discuss topics of importance. Signore Fabbroni is not only an *œconomiste*, but a friend to the Tuscan mode of letting farms *alla metà*, which he thinks is the best for the peasants ; his abilities are great, but facts are too stubborn for him.

The 29th. Churches, palaces, &c. In the afternoon to St. Firenze, to hear an oratorio. At night to a concert, given by a rich Jew on his wedding : a *solo* on the violin, by Nardini.—Crouds—candles—ice—fruits—heat—and—so forth.

The 30th. To Signore Fabbroni, who is second in command under il Cavaliere Fontana, in the whole museum of the Grand Duke ; he shewed me, and our party, the cabinets of natural history, anatomy, machines, pneumatics, magnetism, optics, &c. which are ranked among the finest collections in the world ; and, for arrangement, or rather exhibition, exceed all of them ; but note, no chamber for agriculture ; no collection of machines, relative to that first of arts ; no mechanics, of great talents or abilities, employed in improving, easing, and simplifying the common tools used by the husbandman, or inventing new ones, to add to his forces, and to lessen the expence of his efforts ! Is not this an object as important as magnetism, optics, or astronomy ? Or rather, is it not so infinitely superior, as to leave a comparison absurd ? Where am I to travel, to find agricultural establishments, on a scale that shall not move contempt ? If I find none such in the dominions of a prince reputed the wisest in Europe, where am I to go for them ?

Our Annual Register gave such an account, a few years past, of the new regulations of the Grand Duke, in relation to burials, that I have been anxious to know the truth, by such enquiries, on all hands, as would give me not the letter of the law only, but the practice of it. The fact, in the above-mentioned publication, was exaggerated. The bodies of all who die in a day are carried in the night, on a bier, in a linen covering (and not tumbled naked into a common cart), to the church, but without any lights or singing ; there they receive benediction ; thence they are moved to a house, prepared on purpose, where the bodies are laid, covered, on a marble platform, and a *voiture*, made for that use, removes them to the cemetery, at a distance from the city, where they are buried, without distinction, very deep, not more than two in a grave, but no coffins used. All persons, of whatever rank, are bound to submit to this law, except the Archbishop, and women of religious orders. This is the regulation and the practice ; and I shall freely say, that I condemn it, as an outrage on the common feelings of mankind ; chiefly, because it is an *unnecessary* outrage, from which no use whatever flows. To prohibit lights, singing, processions, and mummary of that sort, was rational ; but are not individuals to dress and incase the dead bodies,

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in whatever manner they please? Why are they not permitted to send them, if they chuse, privately into the country, to some other burying place, where they may rest with fathers, mothers, and other connections? Prejudices, bearing on this point, may be, if you please, ridiculous; but gratifying them, though certainly of no benefit to the dead, is, however, a consolation to the living, at a moment when consolation is most wanted, in the hour of grief and misery. Why is the impassioned and still loving husband, or the tender and feeling bosom of the father, to be denied the last rites to the corpse of a wife or a daughter, especially when such rites are neither injurious nor inconvenient to society? The regulations of the Grand Duke are, in part, entirely rational,—and that part not in the least inconsistent with the consolation to be derived from a relaxation in some other points. But, in the name of common sense, why admit exceptions? Why is the Archbishop to have this favour? Why the religious? This is absolutely destructive of the principle on which the whole is founded; for it admits the force of those prejudices I have touched on, and deem exemption from their tie as a favour! It is declaring such feelings to be follies, too absurd to be indulged, and, in the same breath, assigning the indulgence, as the reward of rank and purity! If the exemption be a privilege so valuable, as to be a favour proper for the first ecclesiastic, and for the religious of the sex only,—you confess the observance to be directly, in such proportion, a burthen, and the common feelings of mankind are sanctioned, even in the moment of their outrage. Nothing could pardon such an edict, but its being absolutely free from all exemptions, and its containing an express declaration and ordinance to be executed, with rigour, on the bodies of the Prince himself, and every individual of his family.

DECEMBER I. To the shop of the brothers Pisani, sculptors, where, for half an hour, I was foolish enough to wish myself rich, that I might have bought Niobe, the gladiator, Diana, Venus, and some other casts from the antique statues. I threw away a few *paols*, instead of three or four hundred *zechins*. Before I quit Florence, I must observe, that besides the buildings and various objects I have mentioned, there are numberless, which I have not seen at all;—the famous bridge Ponte della Santa Trinità deserves, however, a word: it is the origin of that at Neuillé and others in France, but much more beautiful; being indeed the first in the world. The circumstance that strikes one at Florence, is the antiquity of the principal buildings; every thing one sees considerable, is of three or four hundred years standing; of new buildings, there are next to none; all here remind one of the Medicis: there is hardly a street that has not some monument, some decoration, that bears the stamp of that splendid and magnificent family. How commerce could enrich it sufficiently, to leave such prodigious remains, is a question not a little

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curious; for I may venture, without apprehension, to assert, that all the collected magnificence of the House of Bourbon, governing for eight hundred years twenty millions of people, is trivial, when compared with what the Medicis family have left, for the admiration of succeeding ages—sovereigns only of the little mountainous region of Tuscany, and with not more than one million of subjects. And if we pass on to Spain, or England, or Germany, the same astonishing contrast will strike us. Would Mr. Hope, of Amsterdam, said to be the greatest merchant in the world, be able, in this age, to form establishments, to be compared with those of the Medicis? We have merchants in London, that make twenty, and even thirty thousand pounds a year profit, but you will find them in brick cottages, for our modern London houses are no better, compared with the palaces of Florence and Venice, erected in the age of their commerce; the paintings, in the possession of our merchants, a few daubed portraits; their statues, earthen-ware figures on chimney-pieces; their libraries—their cabinets,—how contemptible the idea of a comparison! It is a remarkable fact, that with this prodigious commerce and manufactures, Florence was neither so large nor so populous as at present. This is inexplicable, and demands enquiries from the *historical* traveller:—a very useful path to be trodden by a man of abilities, who should travel for the sake of comparing the things he sees with those he reads of. Trade, in that age, must, from the fewness of hands, have been a sort of monopoly, yielding immense profits. From the modern state of Florence, without one new house that rivals, in any degree, those of the fourteenth or fifteenth centuries, it might be thought, that with their commerce, the Florentines lost every sort of income; yet there is no doubt, that the revenue from land is, at this moment, greater than it was in the most flourishing age of the republic. The revenue of Tuscany is now more equally spent. The government of the Grand Dukes I take to have been far better than the republican, for it was not a republic equally formed from all parts of the territory, but a city governing the country, and consequently impoverishing the whole, to enrich itself, which is one of the worst species of government to be found in the world. When Italy was decorated with fine buildings, the rich nobles must have spent their incomes in raising them: at present, those of Florence have other methods of applying their fortunes; not in palaces, not in the fine arts, not in dinners;—the account I received was, that their incomes are, for the greatest part, consumed by keeping great crowds of domestics; many of them married, with their families, as in Spain. The Marchese Ricardi has forty, each of which hath a family of his own, some of them under servants, but all maintained by him. His table is very magnificent, and served with all sorts of delicacies, yet never any company at it, except the family, tutors, and chaplains. The house of Ranuzzi hath a greater fortune, and also a greater
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number of domestics, in the same stile. No dinners, as in England; no suppers, as in France; no parties; no expensive equipages; little comfort; but a great train of idle lounging pensioners, taken from useful labour, and kept from productive industry; one of the worst ways of spending their fortunes, relatively to the public good, that could have been adopted. How inferior to the encouragement of the fine or the useful arts!

The manner in which our little party has passed their time has been agreeable enough, and wonderfully cheap: we have been very well served by a *traiteur*, with plenty of good things, well dressed, at 4 *paols* a head for dinner, and a slight repast at night; sugar, rum, and lemons for punch, which both French and Italians like very well, added a trifle more. These articles, and the apartment, with wood, which is dear, and the weather, as I noted, very cold, made my whole expence, exclusive of amusements, 3s. 6d. a day English, which surely is marvellously cheap; for we had generally eight or ten things for dinner, and such a dessert as the season would allow, with good wine, the best I have drunk in Italy. The Abbate Amoretti, who, fortunately for me, arrived at Florence the same day as myself, was lodged with a friend, a canon, who being obliged to be absent in the country most of the time, the Abbate, to save the servants the trouble of providing for him only, joined our party, and lived with us for some days, adding to our common bank no slight capital in good sense, information, and agreeableness. Madame de Bouille's easy and unaffected character, and the good humour of the Baron, united with Mr. Stewart, and his young friend, to make a mixture of nations—of ideas—of pursuits—and of tempers, which contributed to render conversation diversified, and the topics more in contrast, better treated, and more interesting; but never one idea, or one syllable, that cast even a momentary shade across that flow of ease and good humour, which gives to every society its best relish. There was not one in the party which any of us wished out of it; and we were too much pleased with one another to want any addition. Had I not been turning my face towards my family, and the old friends I left in England, I should have quitted our little society with more pain. Half a dozen people have rarely been brought together, by such mere accident, that have better turned the little nothings of life to account (if I may venture to use the expression), by their best cement,—good humour.

The 2d. The day of departure must needs give some anxiety to those who cannot throw their small evils on servants. Renew my connection with that odious Italian race, the *vetturini*.—I had agreed for a *compagnon de voyage*; but was alone, which I liked much better. To step at once from an agreeable society, into an Italian *voiture*, is a kind of malady which does not agree with my nerves. The best people appear but blanks at such a moment: the mind having gotten a particular impulse, one cannot so soon give it another. The inn

at Maschere, where I found no fire, but in partnership with some Germans, did not tend much to revive cheerfulness, so I closed myself in that which Sancho wisely says, covers a man all over like a cloak.—18 miles.

The 3d. Dine at Pietra Mala, and, while the dinner was preparing, I walked to the volcano, as it is called. It is a very singular spectacle, on the slope of a mountain, without any hole or apparent crevice, or any thing that tends towards a crater; the fire burns among some stones, as if they were its fuel; the flame fills the space of a cube of about two feet, besides which there are ten or twelve smaller and inconsiderable flames. These I extinguished in the manner Monf. de la Lande mentions, by rubbing hard with a stick among the small stones: the flame catches again in a few moments, but in a manner that convinces me the whole is merely a vent to a current of inflammable air, which Signore Amoretti informed me has been lately asserted by some person who has tried experiments on it. The flame revives with small explosions, exactly like those of inflammable air fired from a small phial; and when I returned to the inn, the landlord had a bottle of it, which he burns at pleasure, to shew his guests. The cause of this phenomenon has been sought in almost every thing but the real fact. I am surprised the fire is not applied to some use. It would boil a considerable copper constantly, without the expence of a farthing. If I had it at Bradfield, I would burn brick or lime, and boil or bake potatoes for bullocks and hogs at the same time. Why not build a house on the spot? and let the kitchen-chimney surround the flame? there would be no danger in living in such a house, certainly as long as the flame continued to burn. It is true the idea of a mine of inflammable air, just under a house, would sometimes, perhaps, alarm one's female visitors; they would be afraid of a magazine of vital air uniting with it, and at one explosion blowing up the æconomical edifice. On the whole, the idea is rather too volcanic for Bradfield: Italy has things better worth importing than burning mountains. The King of Poland's brother, the primate, stopping at Pietra Mala a day for illness (the 25th or 26th November), the weather was so severe that it froze his Cyprus wine; milk was as hard as stone, and burst all the vessels that contained it. On whatever account Englishmen may travel to Tuscany, let not a warm winter be among their inducements.—Sleep at that hideous hole *Loiano*, which would be too bad for hogs accustomed to a clean sty.—26 miles.

The 4th. The passage of the Appenines has been a cold and comfortless journey to me, and would have been much worse, if I had not taken refuge in walking. The hills are almost covered with snow: and the road, in many descents, a sheet of ice. At the St. Marco, at Bologna, they brought me, according to custom, the book to write my name for the commandant, and there I see *Lady Erne and sua figlia*, and *Mr. Hervey, October 14*. Had my stars been lucky enough

enough to have given me more of the society of that cultivated family, during my stay in Italy, it would have smoothed some of my difficulties. I missed Lord Bristol at Nice, and again at Padua. He has travelled, and lived in Italy, till he knows it as well as Derry; and, unfortunately for the society of Suffolk, ten times better than Ickworth. Call on Mr. Taylor, and find, to my great concern, two of his children very ill. Abbate Amoretti, who left Florence a few days ago, is here to my comfort, and we shall continue together till we come to Parma. This is indeed fortunate, for one can hardly wish for a better fellow-traveller.—20 miles.

The 5th. Visit the Institute, which has acquired a greater reputation than it merits. Whoever has read any thing about modern Italy, knows what it contains. I never view museums of natural history, and cabinets of machines for experimental philosophy, but with a species of disgust. I hate expence, and time thrown away for vanity and shew more than utility. A well arranged laboratory, clean, and every thing in order, in a holy-day dress, is detestable; but I found a combination of many pleasures in the disorderly dirty laboratories of Messrs. de Morveau and la Voisier. There is a face of business; there is evidently work going forwards; and if so, there is use. Why move here, and at Florence, through rooms well garnished with pneumatical instruments that are never used? Why are not experiments going forward? If the professors have not time or inclination for those experiments, which it is their duty to make, let others, who are willing, convert such machines to use. Half these implements grow good for nothing from rest; and, before they are used, demand to be new arranged. You shew me abundance of tools, but say not a word of the discoveries that have been made by them. A prince, who is at the expence of making such great collections of machines, should always order a series of experiments to be carrying on by their means. If I were Grand Duke of Tuscany, I should say, “You, Mr. Fontana, have invented an eudiometer; I desire that you will carry on a series of trials, to ascertain every circumstance which changes the result, in the qualities of airs, that can be ascertained by the nitrous test; and if you have other enquiries, which you think more important, employ some person upon whom you can depend.”—And to Mr. John Fabbroni, “You have made five trials on the weight of geoponic soils, taken hydrostatically; make five hundred more, and let the specimens be chosen in conjunction with the professor of agriculture. You have explained how to analyze soils—analyze the same specimens.” When men have opened to themselves careers which they do not pursue, it is usually for want of the means of prosecuting them; but in the museum of a prince; in such cabinets as at Florence or Bologna, there are no difficulties of this sort,—and they would be better employed than in their present state, painted and patched, like an opera girl, for the
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idel to stare at. What would a Watſon, a Milner, or a Priſtley ſay, upon a propoſal to have their laboratories brushed out clean and ſpruce? I believe they would kick out the operator who came on ſuch an errand. In like manner, I hate a library well gilt, exactly arranged, and not a book out of its place; I am apt to think the owner better pleaſed with the reputation of his books, than with reading them. Here is a chamber for machines applicable to mechanics; and the country is full of carts, with wheels two feet high, with large axles; what experiments have been made in this chamber to inform the people on a point of ſuch conſequence to the conduct of almoſt every art? I have, however, a greater quarrel than this with the Inſtitute. There is an apartment of the art of war and fortification. Is there one of the machines of agriculture, and of ſuch of its proceſſes as can be repreſented in minature?—No: nor here, nor any where elſe have I ſeen ſuch an exhibition: yet in the King's library at Paris, the art of Engliſh gardening is repreſented in wax-work, and makes a play-thing pretty enough for a child to cry for. The attention paid to war, and the neglect of agriculture in this Inſtitute, gives me a poor opinion of it. Bologna may produce great men, but ſhe will not be indebted for them to this eſtabliſhment. View ſome churches and palaces, which I did not ſee when here before. In the church of St. Dominico, a ſlaughter of the Innocents, by Guido, which will command attention, how little inclined ſoever you may be to give it. The mother, and the dead child, in the fore-ground, are truly pathetic, and the whole piece finely executed. The number of highly decorated churches at Bologna is ſurpriſing. They count, I think, above an hundred; and all the towns, and many villages in Italy, offer the ſame ſpectacle; the ſums of money inveſted in this manner in the 15th and 16th centuries, and ſome even in the 17th, are truly amazing; the palaces were built at the ſame time, and at this period all the reſt of Europe was in a ſtate of barbariſm: national wealth muſt have been immenſe, to have ſpared ſuch an enormous ſuperfluity. This idea recurs every where in Italy, and wants explanation from modern hiſtorians. The Italian republics had all the trade of Europe; but what was Europe in that age? England and Holland have had it in this age without any ſuch effects; with us architecture takes quite a different turn; it is the diffuſion of comfort in the houſes of private people; not concentrated magnificence in public works. But there does not appear, from the ſize and number of the towns in Italy, built in the ſame ages, to have been any want of this—private houſes were numerous, and well erected. A difference in manners, introducing new and unheard-of luxuries, has probably been the cauſe of the change. In ſuch a diary as this, one can only touch on a ſubject—but the hiſtorians ſhould dwell on them, rather than on battles and ſieges.

The 6th. Left Bologna, with Abbate Amoretti, in a *vettura*, but the day ſo fine and froſty, that we walked three-fourths of the way to Modena. Paſs Anſolazen,

Ansolazen, the seat of the Marchese Abbergatti, who, after having passed his grand climacteric, has just married a *ballarina*, of seventeen. The country to Modena is the same as the flat part of the Bolognese; it is all a dead level plain, inclosed by neatly wrought hedges against the road, with a view of distinguishing properties. I thought, on entering the Modenese dominions, across the river, that I observed rather a decline in neatness and good management. View the city; the streets are of a good breadth, and most of the houses with good fronts, with a clean painted or well washed face—the effect pleasing. In the evening to the theatre, which is of the oddest form I have seen. We had a hodge-podge of a comedy, in which the following passage excited such an immoderate laugh, that it is worth inserting, if only to shew the taste of the audience, and the reputation of the *ballarine*; “*Era un cavallo sì bello, sì svelto, sì agile, di bel petto, gambe ben fatte, groppa grossa, che se fosse stato una cavalla, converrebbe dire che l'anima della prima ballerina del teatro era trasmigrata in quella.*” Another piece of miserable wit was received with as much applause as the most sterling:—Arlecch. “*Cbi e quel rè che ha la più gran corona del mondo?*—Brighel. “*Quello che ha la testa più piccola.*”——24 miles.

The 7th. To the ducal palace, which is a magnificent building, and contains a considerable collection of pictures, yet a melancholy remnant of what were once here. The library, celebrated for its contents, is splendid; we were shewn the curious MS. of which there is an account in De la Lande. The Bible made for the D'Este family is beautifully executed, begun in 1457, and finished in 1463, and cost 1875 *zechini*. In the afternoon, accompanied the Abate Amoretti, to Signore Belentani; and in the evening, to Signore Venturi, professor of physicks in the university, with whom we spent a very agreeable and instructive evening. We debated on the propriety of applying some political principles to the present state of Italy; and I found, that the professor had not only considered the subjects of political importance, but seemed pleased to converse upon them.

The 8th. Early in the morning to Reggio. This line of country appears to be one of the best in Lombardy; there is a neatness in the houses, which are every where scattered thickly, that extends even to the homesteads and hedges, to a degree that one does not always find, even in the best parts of England; but the trees that support the vines being large, the whole has now, without leaves, the air of a forest. In summer it must be an absolute wood. The road is a noble one. Six miles from Modena, we passed the Secchia, or rather the vale ruined by that river, near an unfinished bridge, with a long and noble causeway leading to it, on each side, which does honour to the duke and states of Modena. It being a *festa* (the immaculate conception), we met the country people going to mass; the married women had all muffs, which are here wedding presents. Another thing I observed, for the first time, were children
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standing ready in the road, or running out of the houses, to offer, as we were walking, asses to ride: they have them always saddled and bridled, and the fixed price is 1 *sol* per mile. This shews attention and industry, and is, therefore, commendable. A countryman, who had walked with us for some distance, replied to them, that we were not *Signori d'asini*. In the afternoon to Parma. The country the same; but not with that air of neatness that is between Reggio and Modena; not so well inclosed, nor so well planted; and though very populous, not so well built, nor the houses so clean and neat. Pass the Eusa, a poor miserable brook, now three yards wide, but a bridge for it a quarter of a mile long, and a fine vale, all destroyed by its ravages; this is the boundary of the two duchies.—30 miles.

The 9th. At the academy is the famous picture of the holy family and St. Jerome, by Correggio, a master more inimitable perhaps than Raphael himself. To my unlearned eyes, there is in this painting such a suffusion of grace, and such a blaze of beauty, as strike me blind (to use another's expression) to all defects which learned eyes have found in it. I have admired this piece often in Italy in good copies, by no ordinary masters, but none come near the original. The head of the Magdalen is reckoned the *chief d'œuvre* of Correggio. The celebrated cupola of the Duomo is so high, so much damaged, and my eyes so indifferent, that I leave it for those who have better. At St. Sepolcro, St. Joseph gathering palms, &c. by the same great hand. There are works by him also in the church of St. John, but not equally beautiful, and a copy of his famous *Notte*. At the academy is a fine adoration, by Mazzola. The great theatre here is the largest in the world. In the afternoon to the citadel; but its governor, Count Rezzonico, to whom I had a letter, is absent from Parma. Then to the celebrated *reale typografia* of Signore Bodoni, who shewed me many works of singular beauty. The types, I think, exceed those of Didot at Paris, who often crowds the letters close, as if to save paper. The Daphne and Chloe, and the Amynta, are beautifully executed; I bought the latter, as a specimen of this celebrated press, which really does honour to Italy. Signore Bodoni had the title of the printer to the King of Spain, but never received any salary or even gratification, as I learned in Parma from another quarter; where I was also informed, that the salary he has from the Duke is only 150 *zechini*. His merit is great and distinguished, and his exertions are uncommon. He has 30,000 matrices of type. I was not a little pleased to find, that he has met with the best sort of patron, in Mr. Edwards, the bookseller, at London, who has made a contract with him for an impression of two hundred and fifty of four Greek poets, four Latin, and four Italian ones—Pindar, Sophocles, Homer, and Theocritus; Horace, Virgil, Lucretius, and Plautus; Dante, Petrarca, Ariosto, and Tasso. In searching booksellers shops for
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printed agriculture, I became possessed of a book which I consider as a real curiosity—*Diario di Colorno per l'anno 1789*, preceded by a sermon, on this text, *Ut seductores et veraces*; Corinth. cap. vi. ver. 8. The diary is a catalogue of saints, with the chief circumstances of their lives, their merits, &c. This book, which is put together in the spirit of the tenth century, is (marvellously be it spoken!) the production of the Duke of Parma's pen. The sovereign, for whose education a constellation of French talents was collected—with what effect, let this production witness. Instead of profanely turning friars out of their convents this prince has peopled his palace with monks: and the holy office of inquisition is found at Parma, instead of an academy of agriculture. The duchess has her amusements, as well as her husband: doubtless they are more agreeable, and more in unison with the character and practice of this age. The memoirs of the court of Parma, both during the reigns of Don Philip and the present duke, whenever they are published, for written I should suppose they must be, will make a romance as interesting as any that fiction has produced. If I lived under a government that had the power of fleecing me, to support the extravagancies of a prince, in the name of common feelings, let it be to fill a palace with mistresses, rather than with monks. For half a million of French livres, the river Parma might be made navigable from the Po; it has been more than once mentioned; but the present duke has other and more holy employments for money: Don Philip's were not so directly aimed at the gates of Paradise.

The 10th. In the morning, walked with Signore Amoretti to Vicomero, seven miles north of Parma towards the Po, the seat of the Count de Schaffienatti. For half the way, we had a fine clear frosty sun-shine, which shewed us the constant fog that hangs over the Po; but a slight breeze from the north rising, it drove this fog over us, and changed the day at once. It rarely quits the Po, except in the heat of the day in fine weather in summer, so that when you are to the south of it, with a clear view of the Appenines, you see nothing of the Alps: and when to the north of it, with a fine view of the latter, you see nothing of the Appenines. Commonly it does not spread more than half a mile on each side wider than the river, but varies, by wind, as it did to-day. The country, for four miles, is mostly meadow, and much of it watered; but then becomes arable. Entered the house of a *metayer*, to see the method of living, but found nobody; the whole family, with six or eight women and children, their neighbours, were in the stable, sitting on forms fronting each other in two lines, on a space paved and clean, in the middle of the room, between two rows of oxen and cows: it was most disagreeably hot on entering. They stay there till they go to bed, sometimes till midnight. This practice is universal in Lombardy. Dine with the Count de Schaffienatti, who lives en-

tirely in the country, with his wife. He shewed me his farm, and I examined his dairy, where cheeses are made nearly in the same way, and with the same implements as in the Lodofan; these cheeses may therefore, with as much propriety, be called Parmesan, as those that come from Lodi. My friend, the Abbate Amoretti, having other engagements in this country, I here took leave of him with regret.—14 miles.

The 11th. Having agreed with a *vetturino* to take me to Turin, and he not being able to procure another passenger, I went alone to Firenzola. It is fine sun-shine weather, decisively warmer than ever felt in England at this season: a sharp frost, without affecting the extremities as with us, where cold fingers and toes may be classed among the nuisances of our climate. I walked most of the way. The face of the country is the same as before, but vines decrease after Borgo St. Donnino. An inequality in the surface of the country begins also to appear, and every where a scattering of oak-timber, which is a new feature.—20 miles.

The 12th. Early in the morning to Piacenza, that I might have time to view that city, which, however, contains little worthy of attention. The country changed a good deal to-day. It is like the flat rich parts of Essex and Suffolk. Houses are thinner, and the general face inferior. The inequalities which began yesterday increase.—The two equestrian statues of Alexander and Rannutio Farnese, are finely expressive of life; the motion of the horses, particularly that of Alexander's, is admirable; and the whole performance spirited and alive. They are by John of Bologna, or Moca his *élève*. Sleep at Castel St. Giovanne.—26 miles.

The 13th. Cross a brook, two miles distant, and enter the King of Sardinia's territory, where the skulls of two robbers, who, about two months ago, robbed the courier of Rome, are immediately seen: this is an agreeable object, that strikes us at our entrance into any part of the Piedmontese dominions; the inhabitants having in this respect an ill reputation throughout all Italy, much to the disgrace of the government. The country, to Tortona, is all hill and dale; and being cultivated, with an intermixture of vines, and much inclosed, with many buildings on the hills, the features are so agreeable, that it may be ranked among the most pleasing I have seen in Italy. Within three miles of Voghera, all is white with snow, the first I have seen in the plain; but as we approach the mountains, shall quit it no more till the Alps are crossed. Dine at Voghera, in a room in which the chimney does not smoke; which ought to be noted, as it is the only one free from it since I left Bologna. At this freezing season, to have a door constantly open to aid the chimney in its office; one side burnt by the blaze of a faggot, and the other frozen by a door that opens into the yard, are among the *agrémens* of a winter journey in lat. 45. After Voghera, the hills

hills trend more to the south. The sun setting here is a singular object to an eye used only to plains. The Alps not being visible, it seems to sit long before it reaches the plane of the horizon. Pass the citadel of Tortona on a hill, one of the strongest places in the possession of the King of Sardinia.—33 miles.

The 14th. Ford the Scrivia; it is as ravaging a stream as the Trebbia, subject to dreadful floods, after even two days rain; especially if a Scirocco wind melts the snow on the Appenines: such accidents have often kept travellers four, five, and even six days at miserable inns. I felt myself lighter for the having passed it; for there were not fewer than six or seven rivers, which could have thus stopped me. This is the last. The weather continues sharp and frosty, very cold, the ice five inches thick, and the snow deep. Dine at Alexandria, joined there by a gentleman who has taken the other seat in the *vettura* to Turin. Just on the outside of that town, there is an uncommon covered bridge. The citadel seems surrounded with many works. Sleep at Fellisham, a vile dirty hole, with paper windows, common in this country, and not uncommon even in Alexandria itself.—18 miles.

The 15th. The country, to Asti and Villanova, all hilly, and some of it pleasing. Coming out of Asti, where we dined, the country for some miles is beautiful. My *vetturino* has been travelling, in company with another, without my knowing any thing of the master till to-day; but we joined at dinner; and I found him a very sensible agreeable Frenchman, apparently a man of fashion, who knows every body. His conversation, both at dinner, and in the evening, was no inconsiderable relief to the dullness of such a frozen journey. His name Nicolay.—22 miles.

The 16th. To Turin, by Moncallier; much of the country dull and disagreeable; hills without landscape; and vales without the fertility of Lombardy.—My companion, who is in office as an architect to the King, as well as I could gather from the hints he dropped, lived nine years in Sardinia. The account he gives of that island, contains some circumstances worth noting. What keeps it in its present unimproved situation, is chiefly the extent of estates, the absence of some very great proprietors, and the inattention of all. The Duke of Affinara has 300,000 liv. a-year, or 15,000l. sterling. The Duke of St. Piera 160,000. The Marchese di Pascha, very great. Many of them live in Spain. The Conte de Girah, a grandee of Spain, has an estate of two days journey, reaching from Poula to Oliustre. The peasants are a miserable set, that live in poor cabins, without other chimnies than a hole in the roof to let the smoke out. The *intemperia* is frequent and pernicious every where in summer; yet there are very great mountains. Cattle have nothing to eat in winter, but brouzing on shrubs, &c. There are no wolves. The oil so bad as not to be eatable. Some

wine almost as good as Malaga, and not unlike it. No silk. The great export is wheat, which has been known to yield forty for one; but seven or eight for one is the common produce. Bread, 1*s.* the pound; beef, 2*s.*; mutton, 2½*s.* There are millions of wild ducks; such numbers, that persons fond of shooting have gone thither merely for the incredible sport they afford.

The 17th. Waited on our ambassador, the Honourable Mr. Trevor, who was not at home; but I had an invitation to dinner soon after, which I accepted readily, and passed a very pleasant day. Mr. Trevor's situation is not compatible with his being a practical farmer; but he is a man of deep sense, and much observation; all such are political farmers, from conviction of the importance of the subject. He converses well on it; Mr. Trevor mentioned some Piedmontese nobles, to whom he would have introduced me, if my stay had been long enough; but he would not admit an excuse respecting the Portuguese ambassador, of whom he speaks as a person remarkably well informed; and who loves agriculture greatly. In the evening, accompanied Mrs. Trevor to the great opera-house; a rehearsal of *l'Olympiade*, new-set by a young composer, Frederici; Marchese sung.

The 18th. I am not a little obliged to Mr. Trevor for introducing me to one of the best informed men I have any where met with, Don Roderigo de Souza Continho, the Portuguese minister at the court of Turin, with whom I dined to-day; he had invited to meet me the *Medico* Bonvicino, l'Abbate Vasco, author of several political pieces of merit, and Signore Bellardi, a botanist of considerable reputation, whom I had known before at Turin. What the young and beautiful Madame de Souza thinks of an English farmer, may be easily guessed; for not one word was spoken in an incessant conversation, but on agriculture, or those political principles which tend to cherish or restrain it. To a woman of fashion in England this would not appear extraordinary, for she now and then meets with it; but to a young Piedmontese, unaccustomed to such conversations, it must have appeared odd, uninviting, and unpolite. M. de Souza sent to the late Prince of Brazil, one of the best and most judicious offerings that any ambassador ever made to his sovereign; Portugal he represents as a country capable of vast improvements by irrigation, but almost an entire stranger to the practice; therefore, with a view of introducing a knowledge of its importance, he ordered a model, in different woods, to be constructed of a river; the method of taking water from it; and the conducting of it by various channels over the adjoining or distant lands, with all the machinery used for regulating and measuring the water. It was made on such a scale, that the model was an exhibition of the art, so far as it could be represented in the distribution of water. It was an admirable thought, and might have proved of the greatest importance to his country. This machine is at Lisbon; and, I take it
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for granted, is there considered (if Lisbon be like other courts) as a toy for children to look at, instead of a school for the instruction of a people. I was pleased to find the Portuguese minister among the most intimate acquaintances of Mr. Trevor; the friendship of men of parts and knowledge, does them reciprocal honour: I am sorry to quit Turin, just as I am known to two men who would be sufficient to render any town agreeable; nor should I be sorry if Don Roderigo was a farmer near me in Suffolk, instead of being an ambassador at Turin, for which he is doubtless much obliged to me.

The 19th. The King has sent a message to the Academy of Sciences, recommending them to pay attention to whatever concerns dying. The minister is said to be a man of abilities, from which expression, in this age, we are to understand, a person who is, or seems to be active for the encouragement of manufactures and commerce, but never one who has just ideas on the importance of agriculture in preference to all other objects. To multiply mulberries in Piedmont, and cattle and sheep in Savoy—to do something with the fertile wastes and pestiferous marshes of Sardinia, would give a minister reputation among the few real politicians only in any country: but dying, and buttons*, and scissars, and commerce, are calculated to please the many, and consequently to give reputation to those who build on such foundations. Dine with Mr. Trevor, and continue to find in him an equal ability and inclination to answer such of my enquiries as I took the liberty of troubling him with. In the evening he introduced me to Count Granari, the secretary of state for home affairs, that is the prime minister, under an idea that he had an intention of introducing Spanish sheep: he was ambassador in Spain, and seems, from his conversation, well informed concerning the Spanish flocks. This minister was called home to fill his present important situation, to the satisfaction of the people, who have very generally a good opinion of his ability and prudence. To-morrow I leave Turin: I have agreed with a *vetturino* for carrying me to Lyons across Mont Cenis, in a chariot, and allowed him to take another person; this person he has found; and it is Mr. Grundy, a considerable merchant of Birmingham, who is on his return from Naples.

The 20th. Leave Turin; dine at St. Anthony, like hogs; and smoked all the dinner like hams. Sleep at Suza, a better inn.—32 miles.

The 21st. The shortest day in the year, for one of the expeditions that demand the longest, the passage of Mont Cenis, about which so much has been written. To those who, from reading, are full of expectation of something very sublime, it is almost as great a delusion as to be met with in the regions of romance: if travellers are to be believed, the descent, *rammassant* on the snow, is made with the velocity of a flash of lightning; I was not fortunate enough to

* See Milan.

meet with any thing so wonderful. At the *grande croix* we seated ourselves in machines of four sticks, dignified with the name of *traineau*: a mule draws it, and a conductor, who walks between the machine and the animal, serves chiefly to kick the snow into the face of the rider. When arrived at the precipice, which leads down to Lanebourg, the mule is dismissed, and the *rammassing* begins. The weight of two persons, the guide seating himself in the front, and directing it with his heels in the snow, is sufficient to give it motion. For most of the way he is content to follow very humbly the path of the mules, but now and then crosses to escape a double, and in such spots the motion is rapid enough, for a few seconds, to be agreeable; they might very easily shorten the line one half, and by that method gratify the English with the velocity they admire so much. As it is at present, a good English horse would trot as fast as we *rammassed*. The exaggerations we have read of this business have arisen, perhaps, from travellers passing in summer, and relying on the descriptions of the muleteers. A journey on snow is commonly productive of laughable incidents; the road of the *traineau* is not wider than the machine, and we were always meeting mules, &c. It was sometimes, and with reason, a question who should turn out; for the snow being ten feet deep, the mules had sagacity to consider a moment before they buried themselves. A young Savoyard female, riding her mule, experienced a complete reversal; for, attempting to pass my *traineau*, her beast was a little restive, and tumbling, dismounted his rider: the girl's head pitched in the snow, and sunk deep enough to fix her beauties in the position of a forked post; and the wicked muleteers, instead of assisting her, laughed too heartily to move: if it had been one of the *ballerine*, the attitude would not have been distressing to her. These laughable adventures, with the gilding of a bright sun, made the day pass pleasantly; and we were in good humour enough to swallow with cheerfulness, a dinner at Lanebourg, that, had we been in England, we should have consigned very readily to the dog-kennel.—20 miles.

The 22d. The whole day we were among the high Alps. The villages are apparently poor, the houses ill built, and the people with few comforts about them, except plenty of pine wood, the forests of which harbour wolves and bears. Dine at Modane, and sleep at St. Michel.—25 miles.

The 23d. Pass St. Jean Maurienne, where there is a bishop, and near that place we saw what is much better than a bishop, the prettiest, and indeed the only pretty woman we saw in Savoy; on enquiry, found it was Madame de la Coste, wife of a farmer of tobacco; I should have been better pleased if she had belonged to the plough.—The mountains now relax their terrific features: they recede enough, to offer to the willing industry of the poor inhabitants something like a valley; but the jealous torrent seizes it with the hand of despotism, and,
like

like his brother tyrants, reigns but to destroy. On some slopes vines : mulberries begin to appear ; villages increase ; but still continue rather shapeless heaps of inhabited stones than ranges of houses ; yet in these homely cots, beneath the snow-clad hills, where natural light comes with tardy beams, and art seems more sedulous to exclude than admit it, peace and content, the companions of honesty, may reside ; and certainly would, were the penury of nature the only evil felt ; but the hand of despotism may be more heavy. In several places the view is picturesque and pleasing : inclosures seem hung against the mountain sides, as a picture is suspended to the wall of a room. The people are in general exceedingly ugly and dwarfish. Dine at La Chambre ; sad fare. Sleep at Aguebelle.— 30 miles.

The 24th. The country to-day, that is, to Chambery, improves greatly ; the mountains, though high, recede ; the vallies are wide, and the slopes more cultivated ; and towards the capital of Savoy, are many country houses which enliven the scene. Above Mal Taverne is Chateauneuf, the house of the countess of that name. I was sorry to see, at the village, a *carcan*, or seigneurial standard, erected, to which a chain and heavy iron collar are fastened, as a mark of the lordly arrogance of the nobility, and the slavery of the people. I asked why it was not burned, with the horror it merited ? The question did not excite the surprize I expected, and which it would have done before the French revolution. This led to a conversation, by which I learned, that in the *haut* Savoy, there are no seigneurs, and the people are generally at their ease ; possessing little properties, and the land in spite of nature, almost as valuable as in the lower country, where the people are poor, and ill at their ease. I demanded why ? *Because there are seigneurs every where.* What a vice is it, and even a curse, that the gentry, instead of being the cherishers and benefactors of their poor neighbours, should thus, by the abomination of feudal rights, prove mere tyrants ? Will nothing but revolutions, which cause their *chateaux* to be burnt, induce them to give to reason and humanity, what will be extorted by violence and commotion ? We had arranged our journey, to arrive early at Chambery, for an opportunity to see what is most interesting in a place that has but little. It is the winter residence of almost all the nobility of Savoy. The best estate in the duchy is not more than 60,000 Piedmontese livres a year (3000l.), but for 20,000 liv. they live *en grand seigneur* here. If a country gentleman have 150 louis d'or a year, he will be sure to spend three months in a town ; the consequence of which must be, nine uncomfortable ones in the country, in order to make a beggarly figure the other three in town. These idle people are this Christmas disappointed, by the court having refused admittance to the usual company of French comedians ;—the government fears importing among the rough mountaineers the present spirit of French liberty. Is this weakness or policy ?

policy? But Chambéry had objects to me more interesting. I was eager to view Charmettes, the road, the house of Madame de Warens, the vineyard, the garden, every thing, in a word, that had been described by the inimitable pencil of Rousseau. There was something so deliciously amiable in her character, in spite of her frailties—her constant gaiety and good humour—her tenderness and humanity—her farming speculations—but, above all other circumstances, the love of Rousseau, have written her name amongst the few whose memoirs are connected with us, by ties more easily felt than described. The house is situated about a mile from Chambéry, fronting the rocky road which leads to that city, and the wood of chestnuts in the valley. It is small, and much of the same size as we should suppose, in England, would be found on a farm of one hundred acres, without the least luxury or pretension; and the garden, for shrubs and flowers, is confined, as well as unassuming. The scenery is pleasing, being so near a city, and yet, as he observes, quite sequestered. It could not but interest me, and I viewed it with a degree of emotion; even in the leafless melancholy of December it pleased. I wandered about some hills, which were assuredly the walks he has so agreeably described. I returned to Chambéry, with my heart full of Madame de Warens. We had with us a young physician, a Monsieur Bernard, of Modanne en Maurienne, an agreeable man, connected with people at Chambéry; I was sorry to find, that he knew nothing more of the matter, than that Madame de Warens was certainly dead. With some trouble I procured the following certificate:

Extract from the Mortuary Register of the Parish Church of St. Peter de Lemens.

“ Tho 30th of July, 1762, was buried, in the burying ground of Lemens, Dame Louisa Frances Eleonor de la Tour, widow of the Seigneur Baron de Warens, native of Vevay, in the canton of Berne, in Switzerland, who died yesterday, at ten in the evening, like a good Christian, and fortified with her last sacraments, aged about sixty-three years. She abjured the Protestant religion about thirty-six years past; since which time she lived in our religion. She finished her days in the suburb of Nefin, where she had lived for about eight years, in the house of M. Crepine. She lived heretofore at the Rectus, about four years, in the house of the Marquis d’Alinge. She passed the rest of her life, since her abjuration, in this city. (Signed) GAIME, rector of Lemens.”

“ I, the underwritten, present rector of the said Lemens, certify, that I have extracted this from the mortuary register of the parish church of the said place, without any addition or diminution whatsoever; and, having collated it, have found it conformable to the original. In witness of all which, I have signed the present at Chambéry, the 24th of December, 1789.

(Signed) A. SACHOD, rector of Lemens.”

—23 miles.

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The 25th. Left Chambery much dissatisfied, for want of knowing more of it. Rousseau gives a good character * of the people, and I wished to know them better. It was the worst day I have known, for months past, a cold thaw, of snow and rain; and yet in this dreary season, when nature so rarely has a smile on her countenance, the environs were charming. All hill and dale, tossed about with so much wildness, that the features are bold enough for the irregularity of a forest scene; and yet withal, softened and melted down by culture and habitation, to be eminently beautiful. The country inclosed to the first town in France, Pont Beauvoisin, where we dined and slept. The passage of Echelles, cut in the rock by the sovereign of the country, is a noble and stupendous work. Arrive at Pont Beauvoisin, once more entering this noble kingdom, and meeting with the cockades of liberty, and those arms in the hands of THE PEOPLE, which, it is to be wished, may be used only for their own and Europe's peace.—24 miles.

The 26th. Dine at Tour du Pin, and sleep at Verpilliere. This is the most advantageous entrance into France, in respect of beauty of country. From Spain, England, Flanders, Germany, or Italy by way of Antibes; all are inferior to this. It is really beautiful, and well planted, has many inclosures and mulberries, with some vines. There is hardly a bad feature, except the houses; which, instead of being well built, and white as in Italy, are ugly thatched mud cabins, without chimnies, the smoke issuing at a hole in the roof, or at the windows. Glass seems unknown; and there is an air of poverty and misery about them quite dissonant to the general aspect of the country. Pass Bourgoyn, a large town. Reach Verpilliere. This day's journey is a fine variation of hill and dale, well planted with *chateaux*, and farms and cottages spread about it. A mild lovely day of sun-shine threw no slight gilding over the whole. For ten or twelve days past, they have had, on this side of the Alps, fine open warm weather, with sun-shine; but on the Alps themselves, and in the vale of Lombardy, on the other side, we were frozen and buried in snow. At Pont Beauvoisin and Bourgoyn, our passports were demanded by the *milice bourgeoise*, but no where else: they assure us, that the country is perfectly quiet every where, and have no guards mounted in the villages—nor any suspicions of fugitives, as in the summer. Not far from Verpilliere, pass the burnt *chateau* of M. de Veau, in a fine situation, with a noble wood behind it. Mr. Grundy was here in August, and it had then but lately been laid in ashes; and a peasant was hanging on one of the trees of the avenue by the road, one among many who were seized by the *milice bourgeoise* for this atrocious act.—27 miles.

* S'il est une petite ville au monde où l'on goûte la douceur de la vie dans un commerce agréable & sûr c'est Chambery.

The 27th. The country changes at once; from one of the finest in France, it becomes almost flat and *sombre*. Arrive at Lyons, and there, for the last time, see the Alps; on the quay there is a very fine view of Mont Blanc, which I had not seen before; leaving Italy, and Savoy, and the Alps, probably never to return, has something of a melancholy sensation. For all those circumstances which render that classical country illustrious—the seat of great men—the theatre of the most distinguished actions—the exclusive field in which the elegant and agreeable arts have loved to range—what country can be compared with Italy? to please the eye, to charm the ear, to gratify the enquiries of a laudable curiosity, whither would you travel? In every bosom whatever, Italy is the second country in the world—of all others, the surest proof that it is the first. To the theatre; a musical thing, which called all Italy by contrast to my ears! What stuff is French music! the distortions of embodied dissonance. The theatre is not equal to that of Nantes; and very much inferior to that of Bourdeaux.—18 miles.

The 28th. I had letters to Mons. Goudard, a considerable silk merchant, and, waiting on him yesterday, he appointed me to breakfast with him this morning. I tried hard to procure some information relative to the manufactures of Lyons; but in vain: every thing was *selon* and *suivant*. To Mons. l'Abbé Rozier, author of the voluminous dictionary of agriculture, in quarto. I visited him as a man very much extolled, and not with an idea of receiving information in the plain practical line, which is the object of my enquiries, from the compiler of a dictionary. When Mons. Rozier lived at Beziers, he occupied a considerable farm; but, on becoming the inhabitant of a city, he placed this motto over his door—*Laudato ingentia rura, exiguum colito*, which is but a bad apology for *no farm at all*. I made one or two efforts towards a little *practical* conversation; but he flew off from that centre in such eccentric *radii* of science, that the vanity of the attempt was obvious in a moment. A physician present, remarked to me, that if I wanted to know common practices and products, I should apply to common farmers, indicating by his air and manner, that such things were beneath the dignity of science. Mons. l'Abbé Rozier is, however, a man of considerable knowledge, though no farmer; in those pursuits, which he has cultivated with inclination, he is justly celebrated—and he merits every eulogium, for having set on foot the *Journal de Physique*, which, take it for all and all, is by far the best journal that is to be found in Europe. His house is beautifully situated, commanding a noble prospect; his library is furnished with good books; and every appearance about him points out an easy fortune. Waited then on Mons. de Frossard, a protestant minister, who, with great readiness and liberality, gave me much valuable information; and, for my further instruction on points with which he was not equally acquainted, introduced me to Mons.

Roland

Roland la Platerie, inspector of the Lyons fabrics. This gentleman had notes upon many subjects, which afforded an interesting conversation; and, as he communicated freely, I had the pleasure to find, that I should not quit Lyons without a good portion of the knowledge I sought. This gentleman, somewhat advanced in life, has a young and beautiful wife—the lady to whom he addressed his letters, written in Italy, and which have been published in five or six volumes. Mons. Frossard desiring Mons. de la Platerie to dine with him, to meet me, we had a great deal of conversation on agriculture, manufactures, and commerce; and differed but little in our opinions, except on the treaty of commerce between England and France, which that gentleman condemned, as I thought, unjustly; and we debated the point. He warmly contended, that silk ought to have been included as a benefit to France; I urged, that the offer was made to the French ministry, and refused; and I ventured to say, that had it been accepted, the advantage would have been on the side of England, instead of France, supposing, according to the vulgar ideas, that the *benefit* and the *balance* of trade are the same things. I begged him to give me a reason for believing that France would buy the silk of Piedmont and of China, and work it up to undersell England; while England buys the French cotton, and works it into fabrics that undersell those of France, even under an accumulation of charges and duties? We discussed these, and similar subjects, with that sort of attention and candour that render them interesting to persons who love a liberal conversation upon important points.—Among the objects at Lyons, that are worthy of a stranger's curiosity, is the point of junction of the two great rivers, the Soanne and the Rhone; Lyons would doubtless be much better situated, if it were really at the junction; but there is an unoccupied space sufficient to contain a city half as large as Lyons itself. This space is a modern embankment, that cost six millions, and ruined the undertakers. I prefer even Nantes to Lyons. When a city is built at the junction of two great rivers, the imagination is apt to suppose, that those rivers form a part of the magnificence of the scenery. Without broad, clean, and well built quays, what are rivers to a city but a facility to carry coals or tar-barrels? What, in point of beauty, has London to do with the Thames, except at the terrace of the Adelphi, and the new buildings of Somerset-place, any more than with Fleet-ditch, buried as it is, a common shore? I know nothing in which our expectations are so horribly disappointed as in cities, so very few are built with any general idea of beauty or decoration!

The 29th. Early in the morning, with Mons. Frossard, to view a large farm near Lyons. Mons. Frossard is a steady advocate for the new constitution establishing in France. At the same time, all those I have conversed with in the city, represent the state of the manufacture as melancholy to the last degree. Twenty thousand people are fed by charity, and consequently very ill fed; and

the mass of distress, in all kinds, among the lower classes, is greater than ever was known—or than any thing of which they had an idea. The chief cause of the evil felt here, is the stagnation of trade, occasioned by the emigrations of the rich from the kingdom, and the general want of confidence in merchants and manufacturers; whence, of course, bankruptcies are common. At a moment when they are little able to bear additional burthens, they raise by voluntary contributions, for the poor, immense sums; so that including the revenues of the hospitals, and other charitable foundations, there are not paid, at present, for the use of the poor, less than 40,000 louis d'or a year. My fellow traveller, Mr. Grundy, being desirous to get soon to Paris, persuaded me to travel with him in a post-chaise, a mode of travelling which I detest, but the season urged me to it; and a still stronger motive, was the having of more time to pass in that city, for the sake of observing the extraordinary state of things—of a King, Queen, and Dauphin of France, actual prisoners; I therefore accepted his proposal, and we set off after dinner to-day. In about ten miles come to the mountains. The country dreary; no inclosures, no mulberries, no vines, much waste, and nothing that indicates the vicinity of such a city. At Arnas, sleep at a comfortable inn.—17 miles.

The 30th. Continue early in the morning to Tarar; the mountain of which name is more formidable in reputation than in reality. To St. Syphorien the same features. The buildings increase, both in number and goodness, on approaching the Seine, which we crossed at Roane; it is here a good river, and is navigable many miles higher, and consequently at a vast distance from the sea. There are many flat bottomed barges on it, of a considerable size.—50 miles.

The 31st. Another clear, fine, sun-shine day; rarely do we see any thing like it at this season in England. After Droiturier, the woods of the Bourbonnois commence. At St. Gerund le Puy the country improves, enlivened by white houses and *chateaux*, and all continues fine to Moulins. Sought here my old friend, Monf. L'Abbé Barut, and had another interview with Monf. le Marquis Degouttes, concerning the sale of his *chateau* and estate of Riaux; I desired still to have the refusal of it, which he promised me, and will, I have no doubt, keep his word. Never have I been so tempted on any occasion, as with the wish of possessing this agreeable situation, in one of the finest parts of France, and in the finest climate of Europe. God grant, that, should he be pleased to protract my life, I may not, in a sad old age, repent at not closing of once with an offer to which prudence calls, and prejudice only forbids! Heaven send me ease and tranquillity, for the close of life, be it passed either in Suffolk, or the Bourbonnois!—38 miles.

JANUARY 1, 1790. Nevers makes a fine appearance, rising proudly from the Loire; but, on the first entrance, it is like a thousand other places. Towns,
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thus seen, resemble a groupe of women, huddled close together: you see their nodding plumes and sparkling gems, till you fancy that ornament is the herald of beauty; but, on a nearer inspection, the faces are too often but common clay. From the hill that descends to Pougues, is an extensive view to the north; and after Pouilly a fine scenery, with the Loire doubling through it.—75 miles.

The 2d. At Briare, the canal is an object that announces the happy effects of industry. There we quit the Loire. The country all the way diversified; much of it dry, and very pleasant, with rivers, hills, and woods, but almost every where a poor soil. Pass many *chateaux*, some of which are very good. Sleep at Nemours, where we met with an inn-keeper, who exceeded, in knavery, all we had met with, either in France or Italy: for supper, we had *soupe maigre*, a partridge and a chicken roasted, a plate of celery, a small cauliflower, two bottles of poor *vin du Pays*, and a dessert of two biscuits and four apples: here is the bill:—Potage 1 liv. 10 s.—Perdrix, 2 liv. 10 s. Poulet, 2 liv.—Celeri, 1 liv. 4 s.—Chouffeur, 2 liv.—Pain et dessert, 2 liv.—Feu & apartement, 6 liv.—Total, 19 liv. 8 s. Against so impudent an extortion we remonstrated severely, but in vain. We then insisted on his signing the bill, which, after many evasions, he did, *a l'étoile; Foulliare*. But having been carried to the inn, not as the star, but the *écu de France*, we suspected some deceit; and going out to examine the premises, we found the sign to be really the *écu*, and learned, on enquiry, that his own name was *Roux*, instead of *Foulliare*: he was not prepared for this detection, or for the execration we poured on such an infamous conduct; but he ran away in an instant, and hid himself till we were gone. In justice to the world, however, such a fellow ought to be marked out.—60 miles.

The 3d. Through the forest of Fontainebleau, to Melun and Paris. The sixty *postes* from Lyons to Paris, making three hundred English miles, cost us, including 3 louis for the hire of the post-chaise (an old French cabriolet of two wheels) and the charges at the inns, &c. 15l. English; that is to say, 1s. per English mile, or 6d. per head. At Paris, I went to my old quarter, the hotel de La Rochefoucauld; for at Lyons I had received a letter from the duke de Liancourt, who desired me to make his house my home, just as in the time of his mother, my much lamented friend, the duchess d'Estillac, who died while I was in Italy. I found my friend Lazowski well, and we were *à gorge déployée*, to converse on the amazing scenes that have taken place in France since I left Paris.—46 miles.

The 4th. After breakfast, walk in the gardens of the Thuilleries, where there is the most extraordinary sight that either French or English eyes could ever behold at Paris. The King, walking with six grenadiers of the *milice bourgeoise*, with an officer or two of his household, and a page. The doors of the gardens
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are kept shut in respect to him, in order to exclude every body but deputies, or those who have admission-tickets. When he entered the palace, the doors of the gardens were thrown open for all without distinction, though the Queen was still walking with a lady of her court. She also was attended so closely by the *gardes bourgeois*, that she could not speak, but in a low voice, without being heard by them. A mob followed her, talking very loud, and paying no other apparent respect than that of taking off their hats wherever she passed, which was indeed more than I expected. Her majesty does not appear to be in health; she seems to be much affected, and shews it in her face; but the King is as plump as ease can render him. By his orders, there is a little garden railed off, for the Dauphin to amuse himself in, and a small room is built in it to retire to in case of rain; here he was at work with his little hoe and rake, but not without a guard of two grenadiers. He is a very pretty good-natured looking boy, of five or six years old, with an agreeable countenance; wherever he goes, all hats are taken off to him, which I was glad to observe. All the family being kept thus close prisoners (for such they are in effect) afford, at first view, a shocking spectacle; and is really so, if the act were not effectually necessary to effect the revolution; this I conceive to be impossible; but if it were necessary, no one can blame the people for taking every measure possible to secure that liberty they had seized in the violence of a revolution. At such a moment, nothing is to be condemned but what endangers the national freedom. I must, however, freely own, that I have my doubts whether this treatment of the royal family can be justly esteemed any security to liberty; or, on the contrary, whether it were not a very dangerous step, that exposes to hazard whatever had been gained. I have spoken with several persons to-day, and have stated objections to the present system, stronger even than they appear to me, in order to learn their sentiments; and it is evident, they are at the present moment under an apprehension of an attempt towards a counter revolution. The danger of it very much, if not absolutely, results from the violence which has been used towards the royal family. The National Assembly was, before that period, answerable only for the permanent constitutional laws passed for the future: since that moment, it is equally answerable for the whole conduct of the government of the state, executive as well as legislative. This critical situation has made a constant spirit of exertion necessary amongst the Paris militia. The great object of M. La Fayette, and the other military leaders, is to improve their discipline, and to bring them into such a form as to allow a rational dependence on them, in case of their being wanted in the field; but such is the spirit of freedom, that, even in the military, there is so little subordination, that a man is an officer to-day, and in the ranks to-morrow; a mode of proceeding, that makes it the more difficult to bring them to the point their
leaders

leaders see necessary. Eight thousand men in Paris may be called the standing army, paid every day 15*l.* a man; in which number is included the corps of the French guards from Versailles, that deserted to the people: they have also eight hundred horse, at an expence each of 1500 liv. (62*l.* 15*s.* 6*d.*) a-year, and the officers have double the pay of those in the army.

The 5th. Yesterday's address of the National Assembly to the King has done them credit with every body. I have heard it mentioned, by people of very different opinions, but all concur in commending it. It was upon the question of naming the annual sum which should be granted for the civil list. They determined to send a deputation to his Majesty, requesting him to name the sum himself, and praying him to consult less his spirit of œconomy, than a sense of that dignity, which ought to environ the throne with a becoming splendour. Dine with the Duke de Liancourt, at his apartments in the Thuilleries, which, on the removal from Versailles, were assigned to him as grand master of the wardrobe; he gives a great dinner, twice a-week, to the deputies, at which from twenty to forty are usually present. Half an hour after three was the hour appointed, but we waited, with some of the deputies that had left the Assembly, till seven, before the duke and the rest of the company came.

There is in the Assembly at present a writer of character, the author of a very able book, which led me to expect something much above mediocrity in him; but he is made of so many pretty littlenesses, that I stared at him with amazement. His voice is that of a feminine whisper, as if his nerves would not permit such a boisterous exertion as that of speaking loud enough to be heard; when he breathes out his ideas, he does it with eyes half closed; waves his head in circles, as if his sentiments were to be received as oracles; and has so much relaxation and pretension to ease and delicacy of manner, with no personal appearance to second these prettinesses, that I wondered by what artificial means such a mass of heterogeneous parts became compounded. How strange that we should read an author's book with great pleasure; that we should say, this man has no stuff in him; all is of consequence; here is a character uncontaminated with that *rubbish* which we see in so many other men—and after this, to meet the garb of so much littleness!

The 6th, 7th, and 8th. The Duke of Liancourt having an intention of taking a farm in his own hands, to be conducted on improved principles after the English manner, he desired me to accompany him, and my friend Lazowski, to Liancourt, to give my opinion of the lands, and of the best means towards executing the project, which I very readily complied with. I was here witness to a scene which made me smile: at no great distance from the *chateau* of Liancourt, is a piece of waste land, close to the road, and belonging to the duke. I saw some men very busy at work upon it, hedging it in, in small divisions; levelling,
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and digging, and bestowing much labour for so poor a spot. I asked the steward if he thought that land worth such an expence? He replied, that the poor people in the town, upon the revolution taking place, declared that the poor were the nation; that the waste belonged to the nation; and, proceeding from theory to practice, took possession, without any further authority, and began to cultivate; the duke not viewing their industry with any displeasure, would offer no opposition to it. This circumstance shews the universal spirit that is gone forth; and proves, that were it pushed a little farther, it might prove a serious matter for all the property in the kingdom. In this case, however, I cannot but commend it; for if there be one public nuisance greater than another, it is a man preserving the possession of waste land, which he will neither cultivate himself, nor let others cultivate. The miserable people die for want of bread, in the sight of wastes that would feed thousands. I think them wise, and rational, and philosophical, in seizing such tracks: and I heartily wish there was a law in England for making this action of the French peasants a legal one with us.—72 miles.

The 9th. At breakfast this morning in the Thuilleries. Mons. Desmarets, of the Academy of Sciences, brought a *Memoire, présentée par la Société Royale d'Agriculture, à l'Assemblée Nationale*, on the means of improving the agriculture of France; in which, among other things, they recommend great attention to bees, to panification, and to the obstetrick art. On the establishment of a free and patriotic government, to which the national agriculture might look for new and halcyon days, these were objects doubtless of the first importance. There are some parts of the memoir that really merit attention. Called on my fellow traveller, Mons. Nicolay, and find him a considerable person; a great hotel; many servants; his father a marshal of France, and himself first president of a chamber in the parliament of Paris, having been elected deputy, by the nobility of that city, for the states general, but declined accepting it; he has desired I would dine with him on Sunday, when he promises to have Mons. Decretot, the celebrated manufacturer and deputy of Louviers. At the National Assembly—The Count de Mirabeau, speaking upon the question of the members of the chamber of vacation, in the parliament of Rennes, was truly eloquent—ardent, lively, energetic, and impetuous. At night to the assembly of the Duches d'Anville; the Marquis and Madame Condorcet there, &c. not a word but politics.

The 10th. The chief leaders in the National Assembly, are, Target, Chappellier, Mirabeau, Bernave, Volney the traveller, and, till the attack upon the property of the clergy, l'Abbé Syeyes; but he has been so much disgusted by that step, that he is not near so forward as before. The violent democrats, who have the reputation of being so much republican in principle, that they do not admit any political necessity for having even the name of a king, are called the
enragés.

enragés. They have a meeting at the Jacobins, called the revolution club, which assembles every night, in the very room in which the famous league was formed, in the reign of Henry III.; and they are so numerous, that all material business is there decided, before it is discussed by the National Assembly. I called this morning on several persons, all of whom are great democrats; and mentioning this circumstance to them, as one which favoured too much of a Paris junto governing the kingdom, an idea, which must, in the long run, be unpopular and hazardous; I was answered, that the predominancy which Paris assumed, at present, was absolutely necessary, for the safety of the whole nation; for if nothing were done, but by procuring a previous common consent, all great opportunities would be lost, and the National Assembly left constantly exposed to the danger of a counter-revolution. They, however, admitted, that it did create great jealousies, and no where more than at Versailles, where some plots (they added) are, without doubt, hatching at this moment, which have the King's person for their object: riots are frequent there, under pretence of the price of bread; and such movements are certainly very dangerous, for they cannot exist so near Paris, without the aristocratical party of the old government endeavouring to take advantage of them, and to turn them to a very different end, from what was, perhaps, originally intended. I remarked, in all these conversations, that the belief of plots, among the disgusted party, for setting the King at liberty, is general; they seem almost persuaded, that the revolution will not be absolutely finished before some such attempts are made; and it is curious to observe, that the general voice is, that if an attempt were to be made, in such a manner as to have the least appearance of success, it would undoubtedly cost the King his life; and so changed is the national character, not only in point of affection for the person of their prince, but also in that softness and humanity, for which it has been so much admired, that the supposition is made without horror or compunction. In a word, the present devotion to liberty is a sort of rage; it absorbs every other passion, and permits no other object to remain in view than what promises to confirm it.—Dine with a large party, at the Duke de la Rochefoucauld's; ladies and gentlemen, and all equally politicians; but I may remark another effect of this revolution, by no means unnatural, which is, that of lessening, or rather reducing to nothing, the enormous influence of the sex: they mixed themselves before in every thing, in order to govern every thing: I think I see an end to it very clearly. The men in this kingdom were puppets, moved by their wires, who, instead of giving the *ton*, in questions of national debate, must now receive it, and must be content to move it in the political sphere of some celebrated leader—that is to say, they are, in fact, sinking into what nature intended them for; they will become more amiable, and the nation better governed.

The 11th. The riots at Versailles are said to be serious; a plot is talked of, for eight hundred men to march, armed, to Paris, at the instigation of somebody, to join somebody; the intention, to murder La Fayette, Bailly, and Necker; and very wild and improbable reports are propagated every moment. They have been sufficient to induce Monf. La Fayette to issue, yesterday, an order concerning the mode of assembling the militia, in case of any sudden alarm. Two pieces of cannon, and eight hundred men, mount guard at the Thuilleries every day. See some royalists this morning, who assert, that the public opinion in the kingdom is changing apace; that pity for the King, and disgust at some proceedings of the Assembly, have lately done much: they say, that any attempt at present to rescue the King would be absurd, for his present situation is doing more for him than force could effect, at this moment, as the general feelings of the nation are in his favour. They have no scruple in declaring, that a well concerted vigorous effort would place him at the head of a powerful army, which could not fail of being joined by a great, disgusted, and injured body. I remarked, that every honest man must hope no such event would take place; for if a counter-revolution should be effected, it would establish a despotism, much heavier than ever France experienced. This they would not allow; on the contrary, they believed, that no government could, in future, be secure, that did not grant to the people more extensive rights and privileges than they possessed under the old one. Dine with my brother traveller, the Count de Nicolay; among the company, as the count had promised me, was Monf. Decretot, the celebrated manufacturer of Louviers, from whom I learned the magnitude of the distresses at present in Normandy. The cotton mills which he had shewn me, last year, at Louviers, have stood still nine months; and so many spinning jennies have been destroyed by the people, under the idea that such machines were contrary to their interests, that the trade is in a deplorable situation. In the evening, accompanied Monf. Lazowski to the Italian opera, *La Berbiera di Seviglia*, by Paiesello, which is one of the most agreeable compositions of that truly great master. Mandini and Raffanelli excellent, and Baletti a sweet voice. There is no such comic opera to be seen in Italy, as this of Paris, and the house is always full: this will work as great a revolution in French music, as ever can be wrought in French government. What will they think, by and by, of Lully and Rameau? And what a triumph for the manes of Jean Jaques!

The 12th. To the National Assembly:—a debate on the conduct of the chamber of vacation in the parliament of Rennes, continued. Monf. l'Abbé Maury, a zealous royalist, made a long and eloquent speech, which he delivered with great fluency and precision, and without any notes, in defence of the parliament: he replied to what had been urged by the Count de Mirabeau, on a
former

former day, and spoke strongly on his unjustifiable call on the people of Bretagne, to a *redoubtable denombrement*. He said, that it would better become the members of such an assembly, to count their own principles and duties, and the fruits of their attention, to the privileges of the subject, than to call for a *denombrement*, that would fill a province with fire and bloodshed. He was interrupted by the noise and confusion of the assembly, and of the audience, six several times; but it had no effect on him; he waited calmly till it subsided, and then proceeded, as if no interruption had been given. The speech was a very able one, and much relished by the royalists; but the *enragés* condemned it, as good for nothing. No other person spoke without notes; the Count de Clermont read a speech that had some brilliant passages, but by no means an answer to l'Abbé Maury, as indeed it would have been wonderful if it were, being prepared before he heard the Abbé's oration. It can hardly be conceived how flat this mode of debate renders the transactions of the Assembly. Who would be in the gallery of the English House of Commons, if Mr. Pitt were to bring a written speech, to be delivered on a subject on which Mr. Fox was to speak before him? And in proportion to its being uninteresting to the hearer is another evil, that of lengthening their sittings, since there are ten persons who will read their opinions, to one that is able to deliver an *impromptu*. The want of order, and every kind of confusion, prevails now almost as much as when the Assembly sat at Versailles. The interruptions given are frequent and long; and speakers, who have no right by the rules to speak, will attempt it. The Count de Mirabeau pressed to deliver his opinion after the Abbé Maury; the president put it to the vote, whether he should be allowed to speak a second time, and the whole house rose up to negative it; so that the first orator of the Assembly has not the influence even to be heard to explain—we have no conception of such rules; and yet their great number must make this necessary. I forgot to observe, that there is a gallery at each end of the saloon, which is open to all the world; and side ones for admission of the friends of the members by tickets: the audience in these galleries are very noisy: they clap, when any thing pleases them, and they have been known to hiss; an indecorum which is utterly destructive of freedom of debate. I left the house before the whole was finished, and repaired to the Duke of Liancourt's apartments in the Thuilleries, to dine with his customary party of deputies; Mess. Chapellier and Demeusniers were there, who had both been presidents, and are still members of considerable distinction; M. Volney, the celebrated traveller, also was present; the Prince de Poix, the Count de Montmorenci, &c. On our waiting for the Duke of Liancourt, who did not arrive till half after seven, with the greatest part of the company, the conversation almost entirely turned upon a strong suspicion entertained of the English having made a remittance for the purpose of embroiling matters in the kingdom. The Count

de Thiard, *cordon blue*, who commands in Bretagne, simply stated the fact, that some regiments at Brest had been regular in their conduct, and as much to be depended on as any in the service; but that, of a sudden, money had found its way among the men in considerable sums, and from that time their behaviour was changed. One of the deputies demanding at what period, he was answered*; on which he immediately observed, that it followed the remittance of 1,100,000 liv. (48,125l.) from England, that had occasioned so much conjecture and conversation. This remittance which had been particularly enquired into, was so mysterious and obscure, that the naked fact only could be discovered; but every person present asserted the truth of it. Other gentlemen united the two facts, and were ready to suppose them connected. I remarked, that if England had really interfered, which appeared to me incredible, it was to be presumed, that it would have been either in the line of her supposed interest, or in that of the King's supposed inclination; that these happened to be exactly the same, and if money were remitted from that kingdom, most assuredly it would be to support the falling interest of the crown, and by no means to detach from it any force whatever; in such a case, remittance from England might go to Metz, for keeping troops to their duty, but would never be sent to Brest to corrupt them, the idea of which was grossly absurd. All seemed inclined to admit the justness of this remark, but they adhered to the two facts, in whatever manner they might, or might not, be connected. At this dinner, according to custom, most of the deputies, especially the younger ones, were dressed *au polisson*, many of them without powder in their hair, and some in boots; not above four or five were neatly dressed. How times are changed! When they had nothing better to attend to, the fashionable Parisians were correctness itself, in all that pertained to the *toilette*, and were, therefore, thought a frivolous people; but now they have something of more importance than dress to occupy them; and the light airy character that was usually given them, will have no foundation in truth. Every thing in this world depends on government.

The 13th. A great commotion among the populace late last night, which is said to have arisen on two accounts—one to get at the Baron de Besneval, who is in prison, in order to hang him; the other to demand bread at 2s. the pound. They eat it at present at the rate of twenty-two millions a-year cheaper than the rest of the kingdom, and yet they demand a further reduction. However, the current discourse is, that Favras, an adventurer also in prison, must be hanged to satisfy the people; for as to Besneval, the Swiss cantons have remonstrated so firmly, that they will not dare to execute him. Early in the morning, the guards were doubled, and eight thousand horse and foot are now patrolling the streets. The report of plots, to carry off the King, is in the mouth of every

* It was a late transaction.

one; and it is said, these movements of the people, as well as those at Versailles, are not what they appear to be, mere mobs, but instigated by the aristocrats; and if permitted to rise to such a height as to entangle the Paris militia, will prove the part only of a conspiracy against the new government. That they have reason to be alert is undoubted; for though there should actually be no plots in existence, yet there is so great a temptation to them, and such a probability of their being formed, that supineness would probably create them. I have met with the lieutenant-colonel of a regiment of horse, who is come from his quarters, and who asserts, that his whole regiment, officers and men, are now at the King's devotion, and would march wherever he called, and would execute whatever he ordered, not contrary to their ancient feelings; but that they would not have been inclined to be so obedient before he was brought to Paris; and from the conversation he has had with the officers of other regiments, he believes that the same spirit pervades their corps also. If any serious plans have been laid for a counter-revolution, or for carrying off the King, and their execution has been, or shall be prevented, posterity will be much more likely to have information of it than this age. Certainly the eyes of all the sovereigns, and of all the great nobility in Europe, are on the French revolution; they look with amazement, and even with terror, upon a situation which may possibly be hereafter their own case; and they must expect, with anxiety, that some attempts will be made to reverse an example, that will not want copies, whenever the period is favourable to make them. Dine at the Palais Royal, with a select party; politicians they must be, if they are Frenchmen. The question was discussed, Are the plots and conspiracies of which we hear so much at present, real, or are they invented by the leaders of the revolution, to keep up the spirits of the militia, in order to enable themselves to secure the government on its new foundation irreversibly?

The 14th. Plots! plots!—the Marquis La Fayette, last night, took two hundred prisoners in the *Champs Elysées*, out of eleven hundred that were collected. They had powder and ball, but no musquets. Who? and what are they? is the question; but an answer is not so easily to be had. *Brigands*, according to some accounts, that have collected in Paris for no good purpose; people from Versailles by others; Germans by a third: but every one would make you believe, they are an appendix to a plot laid for a counter-revolution. Reports are so various and contradictory, that no dependence is to be placed on them; nor credit given to one-tenth of what is asserted. It is singular, and has been much commented on, that La Fayette would not trust his standing troops, as they may be called, that is the eight thousand regularly paid, and of whom the French guards form a considerable portion, but he took, for the expedition, the *bourgeoise* only; which has elated the latter as much as it has disgusted the former.

former. The moment seems big with events ; there is an anxiety, an expectation, an uncertainty, and suspense that is visible in every eye one meets ; and even the best informed people, and the least liable to be led away by popular reports, are not a little alarmed at the apprehension of some unknown attempt that may be made to rescue the King, and overturn the National Assembly. Many persons are of opinion, that it would not be difficult to take the King, Queen, and Dauphin away, without endangering them, for which attempt the Thuilleries is particularly well situated, provided a body of troops, of sufficient force, were in readiness to receive them. In such a case, there would be a civil war, which, perhaps, would end in despotism, whatever party came off victorious ; consequently such an attempt, or plan, could not originate in any bosom from true patriotism. If I have a fair opportunity to pass much of my time in good company at Paris, I have also no small trouble in turning over books, MSS. and papers, which I cannot see in England : this employs many hours a day, with what I borrow from the night, in making notes. I have procured also some public records, the copying of which demands time. He who wishes to give a good account of such a kingdom as France, must be indefatigable in the search of materials ; for let him collect with all the care possible, yet when he comes to sit down coolly to the examination and arrangement, will find, that much has been put into his hands, of no real consequence, and more, possibly, that is absolutely useless.

The 15th. To the Palais Royal, to view the pictures of the Duke of Orleans, which I had tried once or twice before to do in vain. The collection is known to be very rich, in pieces of the Dutch and Flemish masters ; some finished with all the exquisite attention which that school gave to minute expression. But it is a *genre* little interesting, when the works of the great Italian artists are at hand : of these the collection is one of the first in the world : Raphael, Hanibal Carracci, Titian, Dominichino, Correggio, and Paul Veronese. The first picture in the collection, and one of the finest that ever came from the easel, is that of the three Maries, and the dead Christ, by H. Carracci ; the powers of expression cannot go further. There is the St. John of Raphael, the same picture as those of Florence and Bologna ; and an inimitable Virgin and Child, by the same great master. A Venus bathing, and a Magdalen, by Titian. Lucretia, by Andrea del Sarto. Leda, by Paul Veronese, and also by Tintoretto. Mars and Venus, and several others, by Paul Veronese. The naked figure of a woman, by Bonieu, a French painter, now living, a pleasing piece. Some noble pictures, by Poussin and Le Seur. The apartments must disappoint every one :—I did not see one good room, and all inferior to the rank and immense fortune of the possessor, certainly the first subject in Europe. Dine at the Duke of Liancourt's : among the company was Monf. de Bougainville, the celebrated circumnavigator, agreeable

agreeable as well as sensible ; the Count de Castellane, and the Count de Montmorenci, two young legislators, as *enragés* as if their names were only Bernave or Rabeau. In some allusions to the constitution of England, I found they hold it very cheap, in regard to political liberty. The ideas of the moment, relative to plots and conspiracies, were discussed, but they seemed very generally to agree, that, however the constitution might, by such means, be delayed, it was now absolutely impossible to prevent its taking place. At night to the national circus, as it is called, at the Palais Royal, a building in the gardens, or area of that palace, the most whimsical and expensive folly that is easily to be imagined : it is a large ball room, sunk half its height under ground ; and, as if this circumstance were not sufficiently adapted to make it damp enough, a garden is planted on the roof, and a river is made to flow around it, which, with the addition of some spirting *jets d'eau*, have undoubtedly made it a delicious place, for a winter's entertainment. The expence of this gew-gaw building, the project of some of the Duke of Orleans' friends, I suppose, and executed at his expence, would have established an English farm, with all its principles, buildings, live stock, tools, and crops, on a scale that would have done honour to the first sovereign of Europe ; for it would have converted five thousand arpents of desert into a garden. As to the result of the mode that *has been* pursued, of investing such a capital, I know no epithet equal to its merits. It is meant to be a concert, ball, coffee, and billiard room, with shops, &c. designed to be something in the style of the amusements of our Pantheon. There were music and singing to night, but the room being almost empty, it was, on the whole, equally cold and *sombre*.

The 16th. The idea of plots and conspiracies has come to such a height as greatly to alarm the leaders of the revolution. The disgust that spreads every day at their transactions, arises more from the King's situation than from any other circumstance. They cannot, after the scenes that have passed, venture to set him at liberty before the constitution is finished : and they dread, at the same time, a change working in his favour in the minds of the people : in this dilemma, a plan is laid for persuading his Majesty to go suddenly to the National Assembly, and, in a speech, to declare himself perfectly satisfied with their proceedings, and to consider himself as at the head of the revolution, in terms so couched as to take away all idea or pretence of his being in a state of confinement or coercion. This is at present a favourite plan ; the only difficulty will be, to persuade the King to take a step that will apparently preclude him from whatever turn or advantage the general feeling of the provinces may work in his favour ; for, after such a measure, he will have reason to expect that his friends will second the views of the democratical party, from an absolute despair of any other principles becoming efficient. It is thought probable, that this scheme
will

will be brought about; and should it be accomplished, it will do more to ease their apprehensions of any attempts than any other plan. I have been among the book-sellers, with a catalogue in hand to collect publications, which, unfortunately for my purse, I find I must have on various topics, that concern the present state of France.—These are now every day so numerous, especially on the subjects of commerce, colonies, finances, taxation, *deficit*, &c. not to speak of the subject immediately of the revolution itself, that it demands many hours every day to lessen the number to be bought, by reading pen in hand. The collection the Duke of Liancourt has made from the very commencement of the revolution, at the first meeting of the notables, is prodigious, and has cost many hundred louis d'or. It is uncommonly complete, and will hereafter be of the greatest value, to consult on abundance of curious questions.

The 17th. The plan I mentioned yesterday, that was proposed to the King, was urged in vain: his Majesty received the proposition in such a manner as does not leave any great hope of the scheme being executed; but the Marquis La Fayette is so strenuous for its being brought about, that it will not yet be abandoned; but proposed again at a more favourable moment. The royalists, who know of this plan (for the public have it not), are delighted at the chance of its failing. The refusal is attributed to the Queen. Another circumstance, which gives great disquiet at present to the leaders of the revolution, is the account daily received from all parts of the kingdom, of the distress, and even starving condition of manufacturers, artists, and sailors, which grows more and more serious, and must make the idea of an attempt to overturn the revolution so much the more alarming and dangerous. The only branch of industry in the kingdom, that remains flourishing, is the trade to the sugar-colonies; and the scheme of emancipating the negroes, or at least of putting an end to importing them, which they borrowed from England, has thrown Nantes, Havre, Marseilles, Bourdeaux, and all other places connected secondarily with that commerce, into the utmost agitation. The Count de Mirabeau says publicly, that he is sure of carrying the vote to put an end to negro slavery—it is very much the conversation at present, and principally amongst the leaders, who say, that as the revolution was founded on philosophy, and supported by metaphysics, such a plan cannot but be congenial. But surely trade depends on practice much more than on theory; and the planters and merchants, who come to Paris to oppose the scheme, are better prepared to shew the importance of their commerce, than to reason philosophically on the demerits of slavery. Many publications have appeared on the subject—some deserving attention.

The 18th. At the Duke of Liancourt's dinner, to-day, meet the Marquis de Caux, the author of the mechanism of societies; notwithstanding all the warmth, and even fire of argument, and vivacity of manner and composition for
which

which his writings are remarkable, he is perfectly mild and placid in conversation, with little of that effervescence one would look for from his books. There was a remarkable assertion made to-day, at table, by the Count de Marguerite, before near thirty deputies; speaking of the determination on the Toulon business, he said, it was openly supported by deputies, under the avowal that more insurrections were necessary. I looked round the table, expecting some decisive answer to be given to this, and was amazed to find that no one replied a word. Monf. Volney, the traveller, after a pause of some moments, declared, that he thought the people of Toulon had acted right, and were justifiable in what they had done. The history of this Toulon business is known to all the world. This Count de Marguerite has a *tet  dure* and a steady conduct—it may be believed that he is not an *enrag *. At dinner, M. Blin, deputy from Nantes, mentioning the conduct of the revolution club at the *Jacobins*, said, we have given you a good president; and then asked the count why he did not come among them? He answered, *Je me trouve heureux en verit  de n'avoir jamais  t  d'aucune soci t  politique particuliere; je pense que mes fonctions sont publiques, et qu'elles peuvent ais ment se remplir sans associations particulieres*. He got no reply here.—At night, Monf. Decretot, and Monf. Blin, carried me to the revolution club at the *Jacobins*; the room where they assemble, is that in which the famous league was signed, as it has been observed above. There were above one hundred deputies present, with a president in the chair; I was handed to him, and announced as the author of the *Arithmetique Politique*; the president standing up, repeated my name to the company, and demanded if there were any objections—None; and this is all the ceremony, not merely of an introduction, but an election: for I was told, that now I was empowered to be present when I pleased, being a foreigner. Ten or a dozen other elections were made. In this club, the business that is to be brought into the National Assembly is regularly debated; the motions are read, that are intended to be made there, and rejected or corrected and approved. When these have been fully agreed to, the whole party are engaged to support them. Plans of conduct are there determined; proper persons nominated for being of committees, and presidents of the Assembly named. And I may add, that such is the majority of numbers, that whatever passes in this club, is almost sure to pass in the Assembly. In the evening at the Duchefs d'Anville's, in whose house I never failed of spending my time agreeably.

One of the most amusing circumstances of travelling into other countries, is the opportunity of remarking the difference of customs amongst different nations in the common occurrences of life. In the art of living, the French have generally been esteemed by the rest of Europe, to have made the greatest proficiency, and their manners have been accordingly more imitated, and their customs more adopted than those of any other nation. Of their

cookery, there is but one opinion; for every man in Europe, that can afford a great table, either keeps a French cook, or one instructed in the same manner. That it is far beyond our own, I have no doubt in asserting. We have about half a dozen real English dishes, that exceed any thing, in my opinion, to be met with in France; by English dishes I mean, a turbot and lobster sauce—ham and chicken—turtle—a haunch of venison—a turkey and oysters—and after these there is an end of an English table. It is an idle prejudice, to class roast beef among them; for there is not better beef in the world than at Paris. Large handsome pieces were almost constantly on the considerable tables I have dined at. The variety given by their cooks, to the same thing, is astonishing; they dress an hundred dishes in an hundred different ways, and most of them excellent; and all sorts of vegetables have a savouriness and flavour, from rich sauces, that are absolutely wanted to our greens boiled in water. This variety is not striking, in the comparison of a great table in France with another in England; but it is manifest, in an instant, between the tables of a French and English family of small fortune. The English dinner, of a joint of meat and a pudding, as it is called, or *pot luck*, with a neighbour, is bad luck in England; the same fortune in France gives, by means of cookery only, at least four dishes to one among us, and spreads a small table incomparably better. A regular dessert with us is expected, at a considerable table only, or at a moderate one, when a formal entertainment is given; in France it is as essential to the smallest dinner as to the largest; if it consist of a bunch of dried grapes only, or an apple, it will be as regularly served as the soup. I have met with persons in England, who imagine the sobriety of a French table carried to such a length, that one or two glasses of wine are all that a man can get at dinner: this is an error: your servant mixes the wine and water in what proportion you please; and large bowls of clean glasses are set before the master of the house, and some friends of the family, at different parts of the table, for serving the richer and rarer sorts of wines, which are drunk in this manner freely enough. The whole nation are scrupulously neat in refusing to drink out of glasses used by other people. At the house of a carpenter or blacksmith, a tumbler is set to every cover. This results from the common beverage being wine and water; but if at a large table, as in England, there were porter, beer, cyder, and perry, it would be impossible for three or four tumblers or goblets to stand by every plate; and equally so for the servants to keep such a number separate and distinct. In table-linen, they are, I think, cleaner and wiser than the English: that the change may be incessant, it is every where coarse. The idea of dining without a napkin seems ridiculous to a Frenchman, but in England we dine at the tables of people of tolerable fortune, without them. A journeyman carpenter in France has his napkin as regularly as his fork; and at an inn, the *fille* always lays a clean one

to every cover that is spread in the kitchen, for the lowest order of pedestrian travellers. The expence of linen in England is enormous, from its fineness; surely a great change of that which is coarse, would be much more rational. In point of cleanliness, I think the merit of the two nations is divided; the French are cleaner in their persons, and the English in their houses; I speak of the mass of the people, and not of individuals of considerable fortune. A *bidet* in France is as universally in every apartment, as a basin to wash your hands, which is a trait of personal cleanliness I wish more common in England; on the other hand their necessary houses are temples of abomination; and the practice of spitting about a room, which is amongst the highest as well as the lowest ranks, is detestable; I have seen a gentleman spit so near the cloaths of a duchess, that I have stared at his unconcern. In every thing that concerns the stables, the English far exceed the French; horses, grooms, harness, and change of equipage; in the provinces you see cabriolets of the last century; an Englishman, however small his fortune may be, will not be seen in a carriage of the fashion of forty years past; if he cannot have another, he will walk on foot. It is not true that there are no complete equipages at Paris, I have seen many; the carriage, horses, harness, and attendance, without fault or blemish;—but the number is certainly very much inferior to what are seen at London. English horses, grooms, and carriages, have been of late years largely imported. In all the articles of fitting up and furnishing houses, including those of all ranks in the estimate, the English have made advances far beyond their neighbours. Mahogany is scarce in France, but the use of it is profuse in England. Some of the hotels in Paris are immense in size, from a circumstance which would give me a good opinion of the people, if nothing else did, which is the great mixture of families. When the eldest son marries, he brings his wife home to the house of his father, where there is an apartment provided for them; and if a daughter do not wed an eldest son, her husband is also received into the family, in the same way, which makes a joyous number at every table. This cannot altogether be attributed to æconomical motives, though they certainly influence in many cases, because it is found in families possessing the first properties in the kingdom. It does with French manners and customs, but in England it is sure to fail, and equally so amongst all ranks of people: may we not conjecture, with a great probability of truth, that the nation in which it succeeds is therefore better tempered? Nothing but good humour can render such a jumble of families agreeable, or even tolerable. In dress they have given the *ton* to all Europe for more than a century; but this is not among any but the highest rank an object of such expence as in England, where the mass of mankind wear much better things (to use the language of common conversation) than in France: this struck me more amongst ladies

who, on an average of all ranks, do not dress at one half of the expence of English women. Volatility and changeableness are attributed to the French as national characteristics,—but in the case of dress with the grossest exaggeration. Fashions change with ten times more rapidity in England, in form, colour, and assemblage; the vicissitudes of every part of dress are phantastic with us: I see little of this in France; and to instance the mode of dressing the gentlemen's hair, while it has been varied five times at London, it has remained the same at Paris. Nothing contributes more to make them a happy people, than the chearful pliancy of disposition with which they adapt themselves to the circumstances of life: this they possess much more than the high and volatile spirits which have been attributed to them; one excellent consequence is, a greater exemption from the extravagance of living beyond their fortunes, than is met with in England. In the highest ranks of life, there are instances in all countries; but where one gentleman of small property, in the provinces of France, runs out his fortune, there are ten such in England that do it. In the blended idea I had formed of the French character from reading, I am disappointed as to three circumstances, which I expected to find predominant. On comparison with the English, I looked for great talkativeness, volatile spirits, and universal politeness. I think, on the contrary, that they are not so talkative as the English; have not equally good spirits, and are not a jot more polite: nor do I speak of certain classes of people, but of the general mass. I think them, however, incomparably better tempered; and I propose it as a question, whether good temper be not more reasonably expected under an arbitrary, than under a free government?

The 19th. My last day in Paris, and, therefore, employed in waiting on my friends, to take leave; amongst whom, the Duke de Liancourt holds the first place; a nobleman, to whose uninterrupted, polite, and friendly offices I owe the agreeable and happy hours which I have passed at Paris, and whose kindness continued so much, to the last, as to require a promise, that if I should return to France, his house, either in town or country, should be my home. I shall not omit observing, that his conduct in the revolution has been direct and manly from the very beginning; his rank, family, fortune, and situation at court, all united to make him one of the first subjects in the kingdom; and upon the public affairs being sufficiently embroiled, to make assemblies of the nobility necessary, his determined resolution to render himself master of the great questions which were then in debate, was seconded by that attention and application which were requisite in a period, when none but men of business could be of importance in the state. From the first assembling of the States General, he resolved to take the party of freedom; and would have joined the *tiers* at first, if the orders of his constituents had not prevented it; he desired them, however, either

either to consent to that step or to elect another representative ; and, at the same time, with equal liberality, he declared, that if ever the duty he owed his country became incompatible with his office at court, he would resign it ; an act that was not only unnecessary, but would have been absurd, after the King himself had become a party in the revolution. By espousing the popular cause, he acted conformably to the principles of all his ancestors, who in the civil wars and confusions of the preceding centuries, uniformly opposed the arbitrary proceedings of the court. The decisive steps which this nobleman took at Versailles, in advising the King, &c. &c. are known to all the world. He is, undoubtedly, to be esteemed one of those who have had a principal share in the revolution, but he has been invariably guided by constitutional motives ; for it is certain, that he has been as much averse from unnecessary violence and sanguinary measures, as those who were the most attached to the ancient government. With my excellent friend Lazowski, I spent my last evening ; he endeavouring to persuade me to reside upon a farm in France, and I enticing him to quit French bustle for English tranquility.

The 20th—25th. By the diligence to London, where I arrived the 25th ; though in the most commodious seat, yet languishing for a horse, which, after all, affords the best means of travelling. Passing from the first company of Paris to the rabble which one sometimes meets in diligences is contrast sufficient,—but the idea of returning to England, to my family, and friends, made all things appear smooth.—272 miles.

The 30th. To Bradfield ; and here terminate, I hope, my travels. After having surveyed the agriculture and political resources of England and Ireland, to do the same with France, was certainly a great object, the importance of which animated me to the attempt : and however pleasing it may be to hope for the ability of giving a better account of the agriculture of France than has ever been laid before the public, yet the greatest satisfaction I feel, at present, is the prospect of remaining, for the future, on a farm, in that calm and undisturbed retirement, which is suitable to my fortune, and which, I trust, will be agreeable to my disposition.—72 miles.

PART SECOND.

CHAP. I.

Of the Extent of France.

THE circumstances which are most apt to command the attention of mankind, for giving importance to a country, are really valuable no farther than as they contribute to the ease and prosperity of the inhabitants. Thus the extent of a kingdom is of no other consequence than affording nourishment for a people too numerous to be reasonably apprehensive of foreign conquest. When a territory is much more considerable than for this purpose, it tends to inspire ambitious projects in the minds of the men that govern, which have proved, perhaps, more disastrous than the deficiency of power that endangers the national defence. France, under Lewis XIV. was a remarkable instance of this fact. The situation to which the ambition of that prince had reduced her immense territory, was hardly preferable to that of Holland, in 1672, whose misfortunes flowed from the same origin. Of the two extremes, France has undoubtedly more to apprehend from the ambition of her own rulers, than from that of any neighbour. Authorities vary considerably in describing the extent of this fine kingdom. The Maréchal de Vauban makes it 30,000 leagues, or 140,940,000 arpents; Voltaire 130,000,000 arpents.—The accuracy of round numbers is always to be doubted. Templeman gives it an extent of 138,837 square geographic miles, of sixty to a degree; a measurement, which renders his tables absolutely useless for any purpose, but that of comparing one country with another, a degree being sixty-nine miles and an half, which makes it 119,220,874 $\frac{1}{3}\frac{2}{3}$ acres.—Pauçon reduces his measure to French arpents, and makes the number 107,690,000. The Encyclopædia, article *France*, assigns 100,000,000 of arpents as the contents; and observes, that, by Cassini's maps, the amount is 125,000,000. A late author* calculates it at 105,000,000: and another† at 135,600,000. None of these accounts seem sufficiently accurate for the purpose of giving a correct idea. The authority on which I am inclined most to rely is that of M. Necker‡, who

* L'Impôt Abonné. 4to. 1789.

† Apologie sur l'édit de Nantes.

‡ Oeuvres. 4to. p. 326.
calculates

calculates it (without Corsica) at 26,951 leagues square, of 2282 $\frac{2}{3}$ toises; this, I find, amounts to 156,024,213 arpents of Paris, or 131,722,295 English acres. Pauſton, by covering his map with ſhot to every indenture of outline, with the greateſt care, found the kingdom to contain 103,021,840 arpents, each of 100 perch, at 22 feet the perch, or 1344 $\frac{4}{5}$ toises ſquare to the arpent; inſtead of which the arpent of Paris contains but 900 toises:—this measurement makes 81,687,016 English acres*.—Notwithſtanding the credit uſually given to this writer for his accuracy, I muſt here reject his authority in favour of that of M. Necker. Pauſton's calculation, which gives 81,687,016 English acres to France, aſſigns by the ſame rule to England 24,476,315†; yet Templeman's ſurvey, at 60 miles to a degree, and therefore confeſſedly below the truth, makes it 31,648,000, which, at 69 $\frac{1}{2}$ to a degree, are 42,463,264 $\frac{1}{3}$; a greater difference than is found between them in eſtimating the ſurface of France, which, by Pauſton, is made 81,687,016 English acres, with a general admiſſion of about a million more; and by Templeman, 88,855,680; or at 69 $\frac{1}{2}$, is 119,220,874 $\frac{1}{3}$.

It is in vain to attempt reconciling theſe contrary accounts. I ſhall therefore adopt, with the author of the *Credit Nationale*‡, the eſtimation of M. Necker, which ſuppoſes 156,024,113 arpents of Paris, or 131,722,295 English acres.

For a compariſon of the French and English dominions, I muſt for the latter adopt Templeman's measurement, who gives to

England,	49,450 ſquare miles.	France,	138,837 ſquare miles,	
Scotland,	27,794			
Ireland,	27,457			
	<hr/>			
	104,701			
Calculated at 60 to a degree; but at 69½ theſe numbers become,				
	Sq. miles.	Acres.	Sq. miles.	Acres.
England,	66,348 -	42,463,264.	France,	186,282 - 119,220,874.
Scotland,	37,292 -	23,867,016		
Ireland,	36,840 -	23,577,630		
	<hr/>	<hr/>		
	140,480	89,907,910		

Hence it appears, that France, according to theſe proportions, contains 29,312,964 acres more than the three Britiſh kingdoms; and it is to be noted, that as the extent of France is taken from the more modern and correct authorities, whence M. Necker deduced his measurement at 131,722,295 English acres, which is

* I have made this reduction, by valuing, with Pauſton, the French arpent at 1,0000, and the English 0,7929.

† That is 30,869,360 arpents royale, of 22 feet to the perch.

‡ Monſ. Jorré. 8vo. 1789. He calculates on 27,000 leagues, at 2282 toises, 5786 arpents of Paris in a league; or in France 156,225,720 arpents. P. 95.

conſequently

consequently much more exact than that of Templeman; so it is equally fair to suppose, that the latter is as much below the fact in the contents of our islands, as he was in those of France. Corrected by this rule, the areas will be

England*,	46,915,933 † acres.	France,	131,722,295 acres.
Scotland,	26,369,695		
Ireland,	26,049,961		
	<hr/>		
	99,335,589		

These numbers, I am upon the whole inclined to believe, are as near to the truth as may reasonably be expected from calculations, when the *data* are not absolutely correct.

CH A P. II.

Of the Soil, and Face of the Country.

THE modern French geographers, in a branch of that science, to which they have properly given the epithet *physical*, have divided the kingdom into what they call *bassins*; that is to say, into several great plains, through which flow the principal rivers, and which are formed of several ridges of mountains, either *original*, as they term it, of granite, or secondary of calcareous and other materials. Of these *bassins* the chief are, 1. Of the Loire and all the the rivers that fall into it. 2. Of the Seine and its branches. 3. Of the Garonne. 4. Of the Rhone and Soane. There are likewise some smaller ones, but of much less account. The reader who wishes to consult the detail of these, may turn to the *Journal Physique*, tom. 30. for a memoir by M. la Metherie.

In respect to the geoponic division of the soils of the kingdom, the rich calcareous plain of the north-eastern quarter first calls for our attention. I crossed this in several directions, and from the observations I made, the following are the limits I would assign to it. On the coast it may be said to extend from Dunkirk to Carentan in Normandy, for the northern promontory of that province, which projects into the sea at Cherbourg, &c. is of a different soil. In M. la Metherie's map is marked a ridge of granite mountains in this promontory; I should remark, that I saw nothing in that country which deserves the

* It may be remarked, that Dr. Grew calculated the real contents of England and Wales at 46,080,000 acres. *Philosophical Transactions*, No. 330, p. 266. Which seems a confirmation that we are not far from the truth.

† Equal to 73,305 square miles.

name of a mountain, any more than at Alençon; merely hills, and those not considerable ones. I may terminate the rich track at Carentan, as thence to Coutances the land is chiefly poor and stoney, and holds, with many variations, quite to Brest. In the line a little to the S. of the coast, before Caen, is seen the first considerable change of soil from Calais; it there becomes a red *stone brash*; this rich tract is here, therefore, narrow. On re-entering Normandy on the side of Alençon, from Anjou and Maine, I first met with the rich loams on a calcareous bottom at Beaumont; at Alençon there is a noble soil, which I then lost no more in advancing northwards. In another line I entered this rich district about ten miles to the south of Tours. The hills on the Loire, though all calcareous than I noticed, are not all rich, though on some the soil is deep and good. Directly to the south of Orleans begins the miserable Sologne, which, though on a calcareous bottom of marl, is too poor to be included in the present district. From Orleans to Paris, and also Fontainebleau, no exceptions are to be made, but in the small space of poor sand stone in the royal forest of the latter town. In a fourth direction this district is entered, but not so decisively as in the preceding cases, a few miles to the south of Nemours. At Croisiere the first chalk is visible to the traveller. Advancing to the N. E. very good land is found near Nangis, and then bearing N. I entered the fertile plain of Brie. Some of the vales through which the Marne flows are rich, and what I saw calcareous; but the hills are poor. The plain of Rheims may be classed in the present district, but at Soissons and thence due N. all is excellent. These limits inclose one of the finest territories that I suppose is to be found in Europe. From Dunkirk to Nemours is not less than one hundred and eighty miles in a right line. From Soissons to Carentan is another right line of about two hundred miles. From Eu, on the Norman coast, to Chartres is one hundred miles; and though the breadth of this rich district at Caen, Bayeux, &c. is not considerable, yet the whole will be found to contain not a trifling proportion of the whole kingdom. This noble territory includes the deep, level, and fertile plain of Flanders, and part of Artois, than which a richer soil can hardly be desired to repay the industry of mankind; two, three, and even four feet deep of moist and putrid, but friable and mellow loam, more inclining to clay than sand, on a calcareous bottom, and from its marine origin (for there can be little doubt but that the whole plain of Flanders and Holland has been covered by the sea, long since our globe has taken its present appearance), abounding with particles that add to the common fertility, resulting from such compounds found in other situations. The putridity of the *humus* in Flanders and its position, being a dead level, are the principal circumstances that distinguish it from the better soils of the rest of this fertile part of Europe. Every step of the way from the very gate of Paris to near Soissons, and thence to Cambray, with but little va-

riation of some inferior hills of small extent, is a sandy loam of an admirable texture, and commonly of considerable depth. About Meaux it is to be ranked among the finest in the world; they call it *bleaunemeau*; it tends much towards an impalpable powder, which betrays few signs of sand, even when, to the eye, it has the appearance of a sandy loam. It is of an admirable texture and friability. Monf. Gibert informed me, that it is of the depth of eighteen feet where his well is digged, and under it a stratum of white marl, found under the whole country, at different depths. This marl has the appearance of a consolidated paste. The line through Picardy is inferior, yet, for the most part, excellent. But all the arable part of Normandy, which is within these limits, is of the same rich friable sandy loam, to a great depth; that from Bernay to Elbœuf can scarcely be exceeded; four to five feet deep of a reddish brown loam on a chalk bottom, and without a stone. As to the pastures of the same province, we have, I believe, nothing either in England or Ireland equal to them; I hold the vale of Limerick to be inferior. The famous Pays de Beauce, which I crossed between Arpajon and Orleans, resembles the vales of Meaux and Senlis; it is not, however, in general, so deep as the former. The limits I have traced are those of great fertility; but the calcareous district, and even of chalk, is much more extensive. To the E. it reaches across Champagne; a strong change, not having occurred to me till about St. Menchould. From Metz to Nancy all is calcareous, but not chalk. Lime-stone land I found plentifully in the southern parts of Alsace; and from Befort across Franche Comté to Dole, all the stones I tried, and many from quarries, were calcareous. Immense districts in Dauphiné and Provence, &c. &c. are the same; I shall therefore only observe, that I remarked the chalk country to extend E. to about St. Menchould, and S. to Nemours and Montargis* in one line. In another, that all of the Angoumois which I saw is the same; much in Poitou, and through Touraine to the Loire. Had I penetrated more to the W. I should probably have found the chalk of Angoumois, and that of the Loire to be connected uninterruptedly. Most of the course of the Loire is, I believe, chalk, and the whole of it calcareous. Hence it appears, that the chalk country of France is of very considerable extent; not less than two hundred miles E. and W. and about as much, but more irregularly, N. and S. and comprises, by far, the richest and most fertile provinces of the kingdom.

The next considerable district, for fertility, is that which I may call, without impropriety, the plain of the Garonne. Passing to the S. from Limosin, it is entered about Creissensac, with the province of Quercy, and improves all the way to Montauban and Toulouse, where it is one of the finest levels of fertile

* I believe much further: and there is the more reason to think so, because Mr. Townshend found, that in another road it reached to Auxere, where he lost it. *Journey through Spain*, vol. i. p. 46.

soil that can any where be seen. It continues, but not equally fruitful, to the foot of the Pyrenees, by St. Gaudents, &c. very even to the eye, when viewed from the promenade at Montauban, which commands one of the richest, as well as magnificent prospects, to be met with in France. This plain I found, however, to be much indented and irregular; for to the W. of Auch, and all beyond it to Bayonne, is too inferior to be admitted; and to the E. Mirepoix, Pamiers, and Carcassonne are among the hills, and all the way from Agen to Bourdeaux, though the river flows through one of the richest vallies that is to be seen in the world, yet the breadth appeared to be every where inconsiderable. Through all this plain, wherever the soil is found excellent, it consists usually of a deep mellow friable sandy loam, with moisture sufficient for the production of any thing; much of it is calcareous. White lime-stone and white chalky loams are found about Cahors, &c. and white loams more tenacious near Montauban. At Tonance, on the Garonne, they are red, and apparently as good at ten feet deep as on the surface.

In travelling from Narbonne to Beziers, Pezenas, Montpellier, and Nimes, every one I conversed with represented that vale as the most fruitful in France. Olives and mulberries, as well as vines, render it very productive; but in point of soil (the only circumstance I consider at present), much the greater part of it is inferior to all I have named. The Bas Poitou, as I was informed by a person who resides in it, is of a fertility that deserves to be classed with the richest soils of France, extending 18 leagues by 12, or 216 square leagues, which, at 5,786 arpents per league, are 249,776 arpents. 100,000 arpents of rich marshes have been drained there*. Being also informed at Nantes, that there was a very rich track to the S. of the Loire, in the quarter of Bourgneuf and Macheoul, I have extended the region of good land to that river, as seen in the annexed map.

The narrow plain of Alsace, the whole fertile part of which hardly exceeds the surface of 1000 square miles, must be classed among the richest soils of France. It resembles Flanders a good deal, though inferior to that fine province. It consists of a deep rich sandy loam, both moist and friable, equal to the large production of all sorts of crops. A more celebrated district is the Limagne of Auvergne, a flat, and chiefly a calcareous vale, surrounded by great ranges of volcanic mountains. It is certainly one of the finest soils in the world. It commences at Riom; the plain there is of a beautiful dead level of white calcareous loam, the whole surface of which is a real marl, but so mixed with *humus* as to be of prime fertility. The French naturalists, that have examined it, assert the depth to be twenty feet of beds of earth, formed of the ruins of what they style the primitive (granite) and volcanized mountains. At Issoire, Dr. Brés shewing me his farm, in an inferior part of the Limagne (for the best of it

* *Des Canaux de Navig.* Par M. de la Lande, p. 391.

reaches no farther than from Riom to Vaires, which is scarcely more than twenty miles), made me observe, that the river had, in all probability, formed the whole plain, as it was adding rapidly to his land, and had given him a depth very perceptible in a few years, having buried the gravelly shingle of its bed, by depositing a rich surface of sandy mud. The vale here, on the banks, is seven or eight feet deep of rich brown sandy loam. On the contrary, there are philosophers who contend for the whole having been a lake. The mountains that surround this vale are various. The white argillaceous stone, in the hills between Riom and Clermont, is calcareous. The volcanic mountains are found to be better than the others, except in the case of *tufa* or cinders, which are so burnt as to be good for nothing. The calcareous and clayey ones good, and the basaltic decomposed and become clay excellent. Their base is commonly granite. The calcareous sandy stones, and the argillaceous calcareous earths are heaped on them by the action of volcanoes, according to the theory of the French philosophers. The fertility that results from the volcanic origin of mountains, has been often remarked, and especially in the case of Etna; the same fact appeared in many tracts of country as I passed from Le Puy to Montelimart, where many considerable mountains are covered with beautiful chestnuts, and various articles of cultivation, which in districts not volcanic are waste, or in a great measure useless.

I have now noticed all the districts of France, which, to my knowledge, are of any remarkable fertility: they amount, as it will be shown more particularly in another place, to above 28 millions of English acres.

Of the other provinces, Bretagne is generally gravel, or gravelly sand, commonly deep, and on a gravelly bottom, of an inferior and barren nature, but in many places on sand stone rock. I tried various specimens, but found none calcareous; and having seen a ship at Morlaix unloading lime-stone from Normandy, I may conclude, that the fact does not contradict the conclusion which I drew from the eye. All that I saw in the two provinces of Anjou and Maine are gravel, sand, or stone—generally a loamy sand or gravel; some imperfect schistus on a bottom of rock; and much that would in the west of England be called a *stone-brash*, and that would do excellently well for turnips: they have the friability, but want the putrid moisture and fertile particles of the better loams. Immense tracks, in both these provinces, are waste, under ling, fern, furze, &c. but the soil of these does not vary from the cultivated parts, and, with cultivation, would be equally good. Touraine is better; it contains some considerable districts, especially to the south of the Loire, where you find good mixed sandy and gravelly loams on a calcareous bottom; considerable tracks in the northern part of the province are no better than Anjou and Maine; and, like them, it is not without its heaths and wastes. Sologne is one of the poorest

poorest and most unimproved provinces of the kingdom, and one of the most singular countries I have seen. It is flat, consisting of a poor sand or gravel, every where on a clay or marl bottom, retentive of water to such a degree, that every ditch and hold was full of it: the improvement of such a country is so obviously effected on the easiest principles, that it is a satire on the French government, and on the individuals who are owners or occupiers of estates in this province, to see it remain in such a miserable condition. Berry is much better, though both sandy and gravelly; but good loams, and some deep, are not wanted in some districts, as that of Chateauxroux, on quarries, and near Vatan on calcareous ones. La Marche and Limosin consist of friable sandy loams; some on granite, and others on a calcarous bottom. There are tracts in these provinces that are very fertile; and I saw none that should be esteemed sterile. Of the granite they distinguish two sorts; one hard, and full of micaeous particles; the grain rather coarse, with but little quartz, hardening in the air in masses, but becoming a powder when reduced to small pieces;—this is used for building. The other sort is in horizontal strata, mixed with great quantities of spar, used chiefly for mending roads, which it does in the most incomparable manner. I was assured at Limoges, that, on the hard granite, there grow neither wheat, vines, nor chestnuts; but upon the other kind, those plants thrive well: I remarked, that this granite and chestnuts appeared together on entering Limosin; and that, in the road to Toulouse, there is about a league of hard granite without that tree. The rule, however, is not general; for so near as to the S. of Souillac, chestnuts are on a calcareous soil.—Poitou consists of two divisions, the upper and the lower; the last of which has the reputation of being a much richer country, especially the grass lands on the coast. The soil of the upper division is generally a thin loam, on an imperfect quarry bottom—a sort of *stone-brash*; in some tracts calcareous: it must be esteemed a poor soil, though admirably adapted to various articles of cultivation. I have already observed, that all I saw of Angoumois is chalk, and much of it thin and poor. Those parts of Guienne and Gascoign, not included in the rich vale of the Garonne, of which I have already spoken, must be considered in respect of soil as poor. The *landes* (heaths of Bourdeaux, though neither unproductive, nor unimproveable, are in their present state to be classed amongst the worst soils of France. I have been assured, that they contain 200 leagues square; and the roots of the Pyrenees are covered with immense wastes, which demand much industry to render profitable. Roussillon is in general calcareous; much of it flat and very stoney, as well as dry and barren: but the irrigated vales are of a most exuberant fertility. The vast province of Languedoc, in productions one of the richest of the kingdom, does not rank high in the scale of soil: it is by far too stoney:—I take seven-eighths of it to be mountainous.

I tra-

I travelled near four hundred miles in it, without seeing any thing that deserved the name of an extensive plain, that of the Garonne, already mentioned (part of which extends within the limits of Languedoc), alone excepted. The productive vale, from Narbonne to Nîmes, is generally but a few miles in breadth; and considerable wastes are seen in most parts of it. Many of the mountains are productive, from irrigation, as I have observed too in the volcanic territory of the Vivarais. Some parts of the vale are however very rich; and indeed there are few finer soils in France than what I saw near the canal, in going from Beziers to Carcassonne. A rich mellow loam, tenacious, and yet friable; in some states the particles adhere into clods; in others they recede and melt with friability. Provence and Dauphiné are mountainous countries, with the variation of some lovely plains and vallies, which bear a very inconsiderable proportion to the whole. Of these two provinces, the former is certainly the driest, in point of soil, in the kingdom. Rock and quarry-land, with sandy gravels, abound there; and the course of the Durance, which in some countries would be a fine vale, is so ruined by sand and shingle, that, in a moderate calculation, above 130,000 acres have been destroyed, which would have been the finest soil in the country, if it had not been for that river. All I saw in both the provinces is calcareous; and I was informed, that the greater part of the mountains of Province are so. These, towards Barcelonnette, and in all the higher parts of the province, are covered with good grass, that feeds a million of emigrating sheep, besides vast herds of cattle. With such a soil, and in such a climate, a country must not be thought unproductive because mountainous.—The vales which I saw are in general fine: that of the Rhone at Lorient, in Dauphiné, is rich,—an admirable sandy clay, five or six feet deep, on a bed of blue marl, with many stones in it. But more to the S. from Montelimart to Orange, this great river passes through soils much inferior. The north plain of this province, as we go from Savoy to Lyons, consists much of a good deep red loam, on a gravel bottom. The county of Venaissin, or district of Avignon, is one of the richest in the kingdom. Its admirable irrigation, is, of itself, sufficient to make it appear so; but I found the soil to consist of rich deep loam, with white and calcareous clays. The whole coast of Provence is a poor stony soil, with exceptions of very small spaces under happier circumstances. About Aix, the land is all calcareous, even the clays that are red and ferruginous. This province, however, contains one of the most singular districts in the kingdom, namely, that of the Crau, which is a stony plain to the S. E. of Arles, not containing less than 350 square miles, or 224,000 acres. It is absolutely covered with round stones of all sizes, some of which are as large as a man's head. The soil under them is not a sand, but appears to be a kind of cemented rubble of fragments of stone, with a small mixture of loam. The naturalist who has described

this

this province, says, they are of a calcareous nature, with neither the grain nor texture of flint; in some quartzose molecules predominate—and others are metallic*. Vegetation is extremely thin, as I shall mention more particularly when I treat of the pasturage of sheep in France.

The Lyonois is mountainous, and what I saw of it is poor, stony, and rough, with much waste land. In passing from Lyons to Moulins, it is, near Roanne, on the limits of the province, before the gravelly plain of the Loire commences, the same which M. La Metherie calls the calcareous plain of Montbriffon.

Auvergne, though chiefly mountainous, is not a poor province; the soil, for a hilly country, is in general above mediocrity, and the highest mountains feed vast herds of cattle, which are exported to a considerable amount. Beside a variety of volcanic soils, Auvergne is covered with granite and gravelly and sandy loams.

The Bourbonnois and Nevernois, form one vast plain, through which the Loire and the Allier pass; the predominant soil, in much the greater part, is gravel; I believe commonly on a calcareous bottom, but at considerable depths; Some tracks are sandy, which are better than the gravels; and others are very good friable sandy loams. The whole, in its present cultivation, must be reckoned amongst the most unproductive provinces of the kingdom, but capable of as great improvement, by a different management, as any district in France.

Burgundy is exceedingly diversified, as I found in crossing it from Franche Comté to the Bourbonnois by Dijon, I saw the best of it; that line is through sandy and gravelly loams; some good vales, some mountains, and some poor granite soils. The subdivision of the province, called Bresse, is a miserable country, where the ponds alone, mostly on a white clay or a marl, amount, as it is asserted by an inhabitant†, to sixty-six square leagues of 2000 toises, not much less than 250,000 acres. This is credible from the appearance of them in the map of Cassini.

Franche Comté abounds with red ferruginous loams, schistus, gravel, with lime-stone in the mountains very common; and I should remark, that all the stones I tried, some of which were from quarries between Besort to Dole, effervesced with acids. From Besançon to Orecamps the country is rocky, quite to the surface much lime-stone; a reddish brown loam on rock; with iron forges all over the country. The whole province is very improveable.

Lorraine is poor in soil; from St. Menchould to the borders of Alsace I saw scarcely any other than stony soils, of various denominations; most of them would in England be called *stone-brash*, or the broken and triturated surface of imperfect quarries, mixed by time, forest, and cultivation, with some loam and

* Hist. Nat. de la Provence. 8vo. 3 tom. 1782. tom. 1. p. 290.

† Observations, expériences, & memoires sur L'Agriculture; par M. Varenne de Fenille. 8vo. 1789. p. 270.

vegetable mould—much is calcareous. There are indeed districts of rich, and even deep friable sandy loams; but the quantity is not considerable enough to deserve attention in a general view. I have already remarked, that the predominant feature of Champagne is chalk; in great tracks it is thin and poor; the southern part, as from Chalons to Troyes, &c. has, from its poverty, acquired the name of *pouilleux*, or lousy. The appropriating of such land to sainfoin is little known there.

I have now made the tour of all the French provinces, and shall in general observe, that I think the kingdom is superior to England in the circumstance of soil. The proportion of poor land in England, to the total of the kingdom, is greater than the similar proportion in France; nor have they any where such tracks of wretched blowing sand as are to be met with in Norfolk and Suffolk. Their heaths, moors, and wastes not mountainous, what they term *lande*, and which are so frequent in Bretagne, Anjou, Maine, and Guienne, are infinitely better than our northern moors; and the mountains of Scotland and Wales cannot be compared, in point of soil, with those of the Pyrenees, Auvergne, Dauphiné, Provence, and Languedoc. Another advantage almost inestimable is, that their tenacious loams do not take the character of clays, which in some parts of England are so stubborn and harsh, that the expence of culture is almost equal to a moderate produce. Such clays as I have seen in Suffex, I never met with in France. The smallness of the quantity of rank clay in that kingdom is indeed surprising.

Face of the Country.

THE chief distinction that marks the faces of different countries, is that of being mountainous or level. In the language, as well as the ideas common in France, mountains are spoken of, to which we should give no other appellation than that of hills: the tracks really mountainous in that kingdom are to be found in the S. only. It is four hundred miles S. of Calais before you meet with the mountains of Auvergne, which are united with those of Languedoc, Dauphiné, and Provence, but not with the Pyrenees, for I crossed the whole S. of France, from the Rhone to the ocean, either by plains or ranges of inconsiderable hills. The mountains of Voge, in Loraine, deserve, perhaps, that name, but yet are not to be ranked with the superior elevations I have noticed. The inequalities of all the rest of the kingdom are sufficient to render the prospects interesting, and to give variety to the face of the country, but they deserve not to be called mountains. Some of the hilly and mountainous tracks of France receive a very considerable beauty from the rich and luxuriant verdure of chestnuts. To those who have not viewed them, it is not easy to believe how
much

much they add to the beauty of the Limosin, the Vivarais, Auvergne, and other districts where they are common. There is no doubt that the Pyrenees are more striking than all the other mountains of France; I have described them so particularly in the Journal, that I would only observe in general here, that their verdure, their woods, their rocks, and their torrents have all the characters of the sublime and beautiful. I saw nothing among the Alps that offered such pleasing scenes as those of the northern parts of Dauphiné; which, however, are less varied than those in the neighbourhood of Chambéry so abounding in landscapes. According to every account, the course of the Isère is a scene of perpetual beauty. The Vivarais, and part of Velay, are most romantic.

Of the great rivers of France I prefer the Seine, which is every where an agreeable object. I should suppose the reputation of the Loire must have originated from persons who either had never seen it at all, or only below Angers, where in truth it merits every *éloge*. From that city to Nantes it is, probably, one of the finest rivers in the world, the breadth of the stream, the islands of woods, the boldness, culture, and richness of the coast, all conspire, with the animation derived from the swelling canvasses of active commerce, to render that line eminently beautiful; but for the rest of its immense course, it exhibits a stream of sand; it rolls shingle through vales instead of water, and is an uglier object than I could possibly have conceived, unless I had actually seen it. The Garonne receives more beauty from the country through which it flows than it confers upon it; the flat banks, fringed with willows, are destructive of beauty. I am not equally acquainted with the Rhone; where I saw it, from Montelimart to Avignon, and again at Lyons, it does not interest me like the Seine. The course of the Soane is marked by a noble track of meadows.

In regard to the general beauty of a country, I prefer Limosin to every other province in France. The banks of the Loire below Angers, and those of the Seine, for two hundred miles from its mouth, superior, undoubtedly, in point of rivers, the capital feature of the country; but the beauty of the Limosin does not depend on any particular feature, but the result of many. Hill, dale, wood, inclosures, streams, lakes, and scattered farms, are mingled into a thousand delicious landscapes, which set off every where this province. Inclosures, which add so much ornament to the face of a country, would furnish observations, but I must treat of them expressly in a more important view.

Of the provinces of the kingdom, not already named, none are of such singular features as to demand particular attention. The beauties of Normandy are to be found on the Seine, and those of Guienne on the Garonne. Bretagne, Maine, and Anjou have the appearance of deserts; and though some parts of Touraine are rich and pleasing, yet most of the province is deficient in beauty. The fertile territories of Flanders, Artois, and Alsace are distinguished by their utility.

utility. Picardy is uninteresting. Champagne in general, where I saw it, ugly, almost as much so as Poitou. Loraine, and Franche Compté, and Bourgogne are *sombre* in the wooded districts, and want chearfulness in the open ones. Berry and La Marche may be ranked in the same class. Sologne merits its epithet, *triste*. There are parts of the Angoumois that are gay, and consequently pleasing.

It may be useful to those who see no more of France than by once passing to Italy, to remark, that if they would view the finest parts of the kingdom, they should land at Dieppe and follow the Seine to Paris, then take the great road to Moulins, and thence quit it for Auvergne, and pass to Viviers, on the Rhone, and so by Aix to Italy. By such a variation from the frequented road, the traveller might suffer for want of good inns, but would be repaid by the sight of a much finer and more singular country than the common road by Dijon offers, which passes, in a great measure, through the worst part of France.

CHAP. III.

Of the Climate of France.

OF all the countries of Europe there is not, perhaps, one that proves the importance of climate, so much as France. In the natural advantages of countries, it is as essential as soil itself; and we can never attain to an idea tolerably correct, of the prosperity and resources of a country, if we do not know how clearly to ascertain the natural advantages or disadvantages of different territories, and to discriminate them from the adventitious effects of industry and wealth. It should be a principal object with those who travel for the acquisition of knowledge, to remove the vulgar prejudices which are found in all countries among those who, not having travelled themselves, have built their information on insufficient authorities.

France admits a division into three capital parts; 1, of vines; 2, of maiz; 3, of olives—which plants will give the three districts of, 1, the northern, where vines are not planted; 2, the central, in which maiz is not planted; 3, the south, in which olives, mulberries, vines, and maiz are all found. The line of separation between vines and no vines, as I observed myself, is at Coucy, ten miles to the N. of Soissons; at Clermont, in the Beauvoisis; at Beaumont, in Maine; and Herbignac, near Guerande, in Bretagne. Now there is something very remarkable in this, that if you draw a strait line on the map from Guerande to Coucy, it passes very near both Clermont and Beaumont; the former

former of which is a little to the north of it, and the latter a little to the south. There are vines at Gaillon and La Roche Guyon, which is a little to the N. of this line; there are also some near Beauvais, the most remote from it which I have seen; but even this distance is inconsiderable; and the melancholy spectacle of the vintage of 1787, which I saw there in the midst of incessant rains, is a proof that they ought to have nothing to do with this branch of culture: and at Angers I was informed, that there are no vines, or next to none, between that place and Laval and Mayenne. Having made this remark on the vine climate of France, I wished to know how far the fact held true in Germany; because, if the circumstance arose from a difference of climate, it ought, by parity of reason, to be confirmed by vines in that country being found much farther north than in France. This happens precisely to be the case; for I find, by a late author, that vines in Germany are found no farther north than lat. 52*. The meeting with these in that latitude is a sufficient proof of the fact in question, since in France their limit is at 49½. The line, therefore, which I have drawn as the boundary of vines in France, may be continued into Germany, and will probably be found to ascertain the vine-climate in that country, as well as in France. The line of separation between maiz and no maiz is not less singular; it is first seen on the western side of the kingdom, in going from the Angoumois and entering Poitou, at Verac, near Ruffec. In crossing Lorraine, I first met with it between Nancy and Luneville. It is deserving of attention, that if a line is drawn from between Nancy and Luneville to Ruffec, that it will run nearly parallel with the other line that forms the separation of vines: but that line across the kingdom, is not formed by maiz in so unbroken a manner, as the other by vines; for in the central journey, we found it no farther north than Douzenach, in the S. of the Limosin; a variation, however, that does not affect the general fact. In crossing from Alsace to Auvergne, I was nearest to this line at Dijon, where is maiz. In crossing the Bourbonnois to Paris, there is an evident reason why this plant should not be found, which is the poverty of the soil, and the unimproved husbandry of all that country, being universally under fallow, and rye, which yields only three or four times the seed. Maiz demands richer land, or better management.—I saw a few pieces so far north as near La Fleche, but they were so miserably bad, as evidently to prove that the plant was foreign to that climate. In order to give the reader a clearer idea of this, I have annexed a map, explaining, at one *coup d'œil*, these zones or climates, which may be drawn from the productions of France.—The line of olives is pretty nearly in the same direction. In travelling south from Lyons, we see them first at Montelimart; and, in going

* *De la Monarchie Prussienne, par M. le Comte de Mirabeau. tom. II. p. 158.*

from Beziers to the Pyrenees, I lost them at Carcassonne: now, the line on the map drawn from Montelimart to Carcassonne, appears at once to be nearly parallel with those of maiz and vines. Hence we may apparently determine, with safety, that there is a considerable difference between the climate of France in the eastern and western parts: that the eastern side of the kingdom is $2\frac{1}{2}$ degrees of latitude hotter than the western, or if not hotter, more favourable to vegetation. That these divisions are not accidental, but have been the result of a great number of experiments, we may conclude from these articles of culture, in general, gradually declining before you quite lose them. On quitting the Angoumois, and entering Poitu, we find maiz dwindling to poor crops, before it ceases to be cultivated: and in going from Nancy to Luneville, I noticed it in gardens, and then but in small pieces in the fields, before it became a confirmed culture. I made the same remark with respect to vines. It is very difficult to account for this fact; it seems probable that the climate is better when remote from the sea, than near it, which is contrary to numerous other facts; and I have remarked, that vines thrive even in the sea air, and almost fully exposed to it, at the mouth of the river of Bayonne, and in Bretagne. A great many repeated observations must be made, and with more attention than is in the power of a traveller, before such a subject, apparently very curious, can be thoroughly ascertained. In making such enquiries as these, a general culture is alone to be regarded: vines will grow in England; I have maiz now on my own farm—and I have seen it at Paris: but this is not the question; for it turns solely on the climate being so well adapted to such articles as to enable the farmer to make them a common culture.

Of the northern climate of France I may remark, that though vines will yield little profit in it for wine, yet there is a strong distinction, in respect of heat, between it and England, at the same time, that much of it is, I believe, to the full as humid as the S. and E. of England. The two circumstances to be attended to in this enquiry are, the quantity of fruit and the verdure and richness of pastures. In regard to heat, we must attend neither to the thermometer nor to the latitude, but to the vegetable productions. I travelled in the fruit season through Artois, Picardy, Normandy, Bretagne, Anjou, and Maine, and I found at every town, I might properly say at every village, such a plenty of fruit, particularly plumbs, peaches, late cherries, grapes, and melons, as never can be seen in England in the very hottest summers. The markets of all the towns, even in that poor and unimproved province of Bretagne, are supplied with these in a profusion of which we have no idea. It was with pleasure I walked through the market at Rennes. If a man were to see no other in France, lighting there from an English balloon, he would in a moment pronounce the climate to be totally different from that of Cornwall, our most south-
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erly county, where myrtles will stand the winter abroad; and from that of Kerry, where the arbutus is so ac-climated, that it seems indigenous, though probably brought from Spain by the original inhabitants of the country. Yet in this province of Bretagne I saw no maize nor mulberries, and, except in the corner I have mentioned, has no vineyards. Paris is not supplied with melons from provinces to the S. but from Harfleur, at the mouth of the Seine.

For the humidity of the climate, I may quote the beautiful verdure of the rich pastures in Normandy, which are never irrigated. And I was a witness to three weeks of such rain at Liancourt, four miles only from Clermont, as I have not known, by many degrees, in England. To the great rains in the N. of France, which render it disagreeable, may be added the heavy snows and the severe frosts, which are experienced there to a greater degree than in the S. of England. I am assured that the N. of Europe has not known a long and sharp frost, which has not been much severer at Paris than at London.

The central division that admits vines without being hot enough for maize, I consider as one of the finest climates in the world. Here are contained the province of Touraine, which, above all others, is most admired by the French; the picturesque province of Limosin; and the mild, healthy, and pleasant plains of the Bourbonnois; perhaps the most eligible countries of all France, of all Europe, as far as soil and climate are concerned. Here you are exempt from the extreme humidity which gives verdure to Normandy and England; and yet equally free from the burning heats which turn verdure itself into a russet brown in the S.; no ardent rays that oppress you with their fervor in summer; nor pinching tedious frosts that chill with their severity in winter; a light, pure, elastic air, admirable for every constitution except consumptive ones. But at the same time that I must commend these central provinces of France, for every circumstance of atmosphere that can render a country agreeable to inhabit, I must guard the reader against the idea of their being free from great inconveniences; they are certainly subject to those in relation to agriculture, which are heavily felt by the farmer. They are subject, in common with the olive district, to violent storms of rain, and what is worse, of hail. Two years ago, a storm of hail swept a track of desolation in a belt across the whole kingdom, to the damage of several millions of our money. Such extended ruin is not common, for, if it were, the finest kingdoms would be laid waste; but no year ever passes without whole parishes suffering to a degree of which we have no conception, and on the whole to the amount of no inconsiderable proportion of the whole produce of the kingdom. It appears, from my friend Dr. Symond's paper on the climate of Italy*, that the mischief of hail is dreadful in that country. I have heard it calculated in the S. of France, that the damage

* Annals of Agriculture, vol. III. p. 137.

in some provinces amounted to one-tenth of the whole produce of them on an average. A few days before my arrival at Barbesieux, there had fallen, at the Duke de la Rochefoucauld's seat in the Angoumois, and some neighbouring parishes, a shower of hail that did not leave a single grape on the vines, and cut them so severely, as to preclude all hope of a crop the year following, and allowed no well founded expectation of any beneficial produce even the third year. In another place, the geese were all killed by the same storm; and young colts were so wounded that they died afterwards. It is even asserted, that men have been known to be killed by hail, when unable to obtain any shelter. This storm destroyed a copse of the duke's, that was of two years growth. With such effects, it must be obvious to every one, that all sorts of corn and pulse must be utterly destroyed. At Pompinian, between Montauban and Toulouse, I was witness to such a shower of rain as never fell in Britain; in that rich vale, the corn, before the storm, made a noble appearance; but imagination can hardly picture a more entire destruction than it poured over the whole; the finest wheat was not only beaten flat to the ground, but streams of liquid mud covered it in many places, in a manner that made all expectation of recovery hopeless. These hasty and violent showers, which are of little consequence to a traveller, or to the residence of a gentleman, are dreadful scourges to the farmer, and immense drawbacks from the mass of national products.

A circumstance of less consequence, but not undeserving attention, is the frosts which happen in the spring. We know in England how injurious these are to all the fruits of the earth, and how much they are supposed to damage even its most important product. Towards the end of May 1787, I found all the walnut trees with leaves turned quite black by them, S. of the Loire; and farther to the S. at Brive, we no sooner saw fig trees, for the first time, scattered about the vineyards, than we remarked them bound about with straw to defend them from the frosts of June. Still more to the S. about Cahors, the walnut trees were black on the 10th of June by frosts, within a fortnight; and we were informed of rye being in some years thus killed; and that rarely there is any spring month secure from these unseasonable attacks. In the N. E. quarter I found, in 1789, the frost of the preceding winter had made a sad havock amongst the walnut trees, most of which were killed in Alsace, and the dead trees made a strange figure in summer; they were left in expectation of their shooting again, and some few did. From Autun, in Burgundy, to Bourbon Lancey, the broom was all killed. Spring frosts were also complained of as much as on the other side of the kingdom. About Dijon they said that they have them often late, and they damage or destroy every thing. And all the countries within reach of the mountains of Voge are affected by the snow that falls upon them, which was in 1789, on the 29th of June. This renders the vineyard an uncertain culture. Perhaps it may arise from the late frosts in the spring,

spring, that we meet with so few mulberries in France N. of the olive district. The profit of that tree is very great, as I shall explain fully in another place; yet the districts, where they are found in France, are very inconsiderable, when compared with the extent of the whole kingdom. It has been conceived in England, that the mildew is owing to late frosts; when I found myself in a region where rye was sometimes thus killed in June, and where every walnut hung with black, I naturally enquired for that distemper, and found in some places, near Cahors for instance, that their wheat was perfectly exempt from that malady in many springs, when other plants suffered the most severely; and we met even with farmers whose lands were so little subject to the distemper that they hardly knew it. This should seem to set aside the theory of frosts being the cause of that malady. As spring frosts are as mischievous in France as they can be with us, so also are they troubled with autumnal ones earlier than is common with us. On the 20th of September 1787, in going on the S. of the Loire, from Chambord to Orleans, we had so smart a one, that the vines were hurt by it; and there had been, for several days, so cold a N. E. wind, yet with a bright sun, that none of us stirred abroad without great coats.

The olive-climate contains but a very inconsiderable portion of the kingdom, and of that portion, not in one acre out of fifty is this tree cultivated. Several other plants, beside the olive, mark this climate. Thus at Montelimart, in Dauphiné, besides that tree, you meet with, for the first time, the pomgranate, the arbor judæ, the paliurus, figs, and the evergreen oak; and with these plants, I may add also that detestable animal the mosquito. In crossing the mountains of Auvergne, Velay, and Vivarais, I met, between Pradelles and Thuytz, mulberries and flies at the same time; by the term flies, I mean those myriads of them, which form the most disagreeable circumstance of the southern climates. They are the first of torments in Spain, Italy, and the olive-district of France: it is not that they bite, sting, or hurt, but they buz, teize, and worry: your mouth, eyes, ears, and nose, are full of them: they swarm on every eatable, fruit, sugar, milk, every thing is attacked by them in such myriads, that if they are not driven away incessantly by a person who has nothing else to do, to eat a meal is impossible. They are, however, caught on prepared paper, and other contrivances, with so much ease, and in such quantities, that were it not from negligence they could not abound in such incredible quantities. If I farmed in those countries, I think I should manure four or five acres every year with dead flies. Two other articles of culture in this climate, which deserve to be mentioned, though too inconsiderable to be a national object, are capers in Provence, and oranges at Hieres. The latter plant is so tender, that this is supposed to be the only part of France in which it will thrive in the open air. The whole of Roussillon is to the south of this, yet none are to be found there. I went to Hieres to view them, and it was with pain I found

found them almost, without exception, so damaged by the frost, in the winter of 1788, as to be cut down, some to the ground, and others to the main stem. Vast numbers of olives were in the same situation throughout the whole olive-district, and abundance of them absolutely killed. Thus we find, that, in the most southerly part of France, and even in the most sheltered and secure situations, such severe frosts are known as to destroy the articles of common cultivation.

In the description I took of the climate of Provence, from *Monf. le President, Baron de la Tour d'Aigues*, he informed me, that hail, in some years, does not break glass; but it was mentioned as an extraordinary thing. The only seasons in which is to be expected rain with any degree of certainty, are the equinoxes, when it comes violently for a time. No dependence for a single drop in June, July, or August, and the quantity always very small; which three months, and not the winter ones, are the pinching season for all great cattle. Sometimes not a drop falls for six months together*. They have white frosts in March, and sometimes in April. The great heats are never till the 15th of July nor after the 15th of September. Harvest begins June 24th, and ends July 15th—and Michaelmas is the middle of the vintage. In many years no snow is to be seen, and the frosts not severe. The spring is the worst season in the year, because the *vent de bize*, the *mæstrale* of the Italians, is terrible, and sufficient, in the mountains, to blow a man off his horse; it is also dangerous to the health, from the sun, at the same time, being both high and powerful. But in December, January, and February, the weather is truly charming, with the *bize* very rarely, but not always free from it; for, on the 3d of January 1786, there was so furious a *mæstrale*, with snow, that flocks were driven four or five leagues from their pastures; numbers of travellers, shepherds, sheep and asses in the Crau perished. Five shepherds were conducting eight hundred sheep to the butcheries at Marseilles, three of whom, and almost all the sheep, perished†. To make a residence in these provinces agreeable, a man should also avoid the great summer heats. For during the last week in July, and some days in August, I experienced such a heat at Carcassonne, Mirepoix, Pamiers, &c. as rendered the least exertion, in the middle of the day, oppressive: it exceeded any thing I felt in Spain. It was impossible to support a room that was light. No comfort but in darkness; and even there, rest was impossible from myriads of flies‡. It is true, such heats are not of long duration; if they were so, nobody, able to

* A writer, who has been criticised for this assertion, was therefore right—"Telle est la position des provinces du midi on l'on reste souvent, six mois entiers, sans voir tomber une seule goutte d'eau." *Corps complet d'Agri.* tom. VIII. p. 56.

† *Traité de l'Olivier, par M. Couture.* II tom. 8vo. Aix, 1786. tom. I. p. 79.

‡ I have been much surprised, that the late learned Mr. Harmer should think it odd to find, by writers who treated of southern climates, that driving away flies was an object of importance. Had he been with me in Spain and in Languedoc, in July and August, he would have been very far from thinking there was any thing odd in it. *Observ. on divers passages of scripture*, vol. IV. p. 159.

quit the country, would reside in it. These climates are disagreeable in spring and summer, and delicious in winter only. In the Bourbonnois, Limosin, and Touraine, there is no *vent de bise*. On the mountains above Tour d'Aigues, are chiefly found *lavendula*—*thymus*—*cistus rosea*—*cistus albidus*—*sorolia bitumina*—*buxus semper virens*—*quercus ilex*—*pinus montana*—*rosmarinus officinalis*—*rhamnus cathartica*—*genista montis ventosa*—*genista hispanica*—*juniperus phœnicia*—*satureja montana*—*bromus sylvatica*, &c. In the stubbles of all the olive-district, and in every waste spot are found *centaurea calycitropa*—*centaurea solstitialis*,—also the *eryngium campestrum*, and the *eryngium amethystinum*:—they have sown in Provence, the *datura stramonium*, which is now habituated to the country. In the mountains, from Cavalero to Frejus, and also in that of Estrelles, the *lentiscus*—*myrtus*—*arbutus*—*lavendula*—*cistus*—and *laurustinus*.

Upon a general view of the climate of France, and upon comparing it with that of countries, not so much favoured apparently by nature, I may remark, that the principal superiority of it arises from adapting so large a portion of the kingdom to the culture of the vine; yet this noble plant is most unaccountably decried by abundance of writers, and especially by French ones, though the farmer is enabled to draw as extensive a profit from poor and otherwise barren, and even almost perpendicular rocks, as from the richest vales.—Hence immense tracks of land may be ranked in France among the most valuable, which in our climate would be absolutely waste, or at least applied to no better use than warrens or sheep walks. This is the great superiority which climate gives to that kingdom over England:—of its nature and extent, I shall treat fully under another head.

The object of the next importance is peculiar to the olive and maiz districts, and consists in the power of having, from the nature of the climate, two crops a-year on vast tracks of their arable land; an early harvest, and the command of plants, which will not thrive equally well in more northern climates, give them this invaluable advantage. We see wheat stubbles left in England, from the middle of August, to yield a few shillings by sheep, which, in a hotter climate, would afford a second crop, yielding food for man, such as millet, the fifty day maiz (the *cinquantina* of the Italians) &c.; or prove a better season for turnips, cabbages, &c. than the common season for them here. In Dauphiné, I saw buck-wheat in full blossom the 23d of August, that had been sown after wheat. I do no more than name it here, since, in another place, it must be examined more particularly. Mulberries might in France be an object of far greater importance than they are at present, and yet the spring frosts are fatal impediments to the culture: that this plant must be considered for all important purposes, as adapted only to southern climates, appears from this, that Tours is the only place I know in France, north of the maiz climate, where they are

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cultivated for silk with any success: considerable experiments have been made (as I shall shew in the proper place) for introducing them into Normandy and elsewhere, but with no success; and the force of this observation is doubled, by the following fact—that they succeed much better in the olive climate than in any part of the kingdom. But that they might be greatly extended, cannot for a moment be doubted. In going south, we did not meet with them till we came to Causade, near Montauban. In returning north, we saw them at Auch only—a few at Aguillon, planted by the duke—the promenade, at Poitiers, planted by the intendant—and another at Verteul, by the Duke d’Anville; all which are experiments that have not been copied, except at Auch. But at Tours there is a small district of them. In another direction, they are not met with after Moulins, and there very few. Maiz is an object of much greater consequence than mulberries; when I give the courses of the French crops, it will be found, that the only good husbandry in the kingdom (some small and very rich districts excepted) arises from the possession and management of this plant. Where there is no maiz, there are fallows; and where there are fallows, the people starve for want. For the inhabitants of a country to live upon that plant, which is the preparation for wheat, and at the same time to keep their cattle fat upon the leaves of it, is to possess a treasure, for which they are indebted to their climate. The quantity of all the common sorts of fruits, which, through the greater part of France, is such as to form a considerable object in the subsistence of the great mass of the people, is a point of more consequence than appears at first sight. To balance these favourable circumstances, other countries, not so happily situated (especially England) have advantages of an opposite nature, which are very material in the practice of their agriculture: that humidity of atmosphere, which the French provinces north of vines enjoy—which England has in a greater degree, and Ireland still more, and which is better marked by the hygrometer than by the rain gage, is of singular importance in the maintenance of cattle by pasturage, and in adapting the courses of crops to their support. Artificial grasses, turnips, cabbages, potatoes, &c. thrive best in a humid climate. It would take up too much room here fully to explain this; to mention it will be sufficient for those who have reflected on similar subjects. From a due attention to all the various circumstances that affect this question, which, relatively to agriculture, is the best climate, that of France, or that of England?—I have no hesitation in giving the preference to France. I have often heard, in conversation, the contrary asserted, and with some appearance of reason—but I believe the opinion has arisen more from considering the actual state of husbandry in the two countries, than the distinct properties of the two climates. We make a very good use of our’s; but the French are, in this respect, in their infancy, through more than half the kingdom.

C H A P. IV.

On the Produce of Corn, the Rent, and the Price of Land in France.

IN England, we have not the advantage of one uniform measure of land; there are three or four different acres in common use: but the general statute measure of the realm has gained ground rapidly of late years, so that the greater part of the counties have rid themselves of the pest of customary measure; and where this beneficial effect has not taken place, yet almost every man one can converse with, knows the proportion their own measure bears to the statute, which greatly facilitates all agricultural enquiries in this kingdom. In Ireland, the uniformity is still greater; for they have only the Irish and the Conyningham measure, except in a very few districts that have adopted the English statute acre. In the measure of corn also, we have only the variations of the bushel to guard against; for the measure is every where a bushel, and the difference of the contents, not much through the greater part of the kingdom; add to this, that the name and the contents of the statute capacity of eight gallons, is every where understood; and that the gallon itself is of the same contents. In Ireland, the statute barrel of four bushels takes place universally; but in France, the infinite perplexity of the measures exceeds all comprehension. They differ not only in every province, but in every district, and almost in every town; and these tormenting variations are found equally in the denominations and contents of the measures of land and corn. To these sources of confusion, is added the general ignorance of the peasantry, who know nothing of the Paris arpent, or the Paris septier, the most commonly received measure of the kingdom. For the knowledge of a French farmer is limited absolutely to his farm and his market; he never looks into a newspaper or a magazine, where the difference of the measures of the kingdom would probably strike his attention, many times in his life. And if he were rather better instructed, yet, as there are two national measures of land, they would occasion a confusion of which we can form no judgment: the arpent de Paris, and the arpent de France, are both legal and common measures; notwithstanding which, they are of very different contents; and, what is strange to say, are sometimes confounded by French writers on agriculture, as I shall shew in more instances than one—even by societies in their public memoirs. The denominations of French measure, as the reader will see, are almost infinite, and without any common standard to which they can be referred: the number of square feet in the contents is the only rule to adhere to: yet the foot itself varies, and contains, in some provinces, as Lo-

rairie, but ten inches and a fraction. Even the valuation of money itself there failed me; the measure of corn and land peculiar, and the *livre* and *sol* no longer of the same value as in the rest of France. The denominations of bushel and acre pervade all England; and the mere denomination leads every where towards proportioning the contents to the common standards; but in France, they have no common denomination: if you travel seventy miles from Paris, in some directions, you hear no more of the *septier*, or the *arpent*: you find the *mine* of land, even within thirty miles of the capital,—and a little farther, you will be bewildered with *franchars* of corn, and *manco*s of land. The only clue tolerably general, that can be in the least relied upon, is drawn from the quantity of seed sown: the measure of wheat or rye, and of land also, hath often in France the same denomination, as *septier*, *septeree*; *quartier*, *quarteree*; *manco* of corn and of land: *boisseau*, *boiselee*, &c.—These generally imply, that the measure of corn is the quantity of seed sown on the same denomination of land. But I have found variations even in this; so that great caution is necessary before a traveller can note his information. When to this confusion of measures is added the almost universal ignorance of the people in the provinces, who often know nothing of their own measures, and give information totally erroneous, as I have found, from suspecting their authority, by its militating with the idea I formed from the eye, and from applying for certainty to land-surveyors (*arpenteurs*), the reader will be ready to credit me in assuring him, that the labour, perplexity, and vexation, which the present chapter has given me, both in travelling and in writing, has much exceeded any thing I could have conceived before I went abroad; and which no person can believe to the extent of the truth, who has not been engaged under equal difficulties in similar pursuits. After all my labour, it would be a want of candour were I to offer the result thus given as correct. I am confident, that in several articles, and perhaps in more than I suspect, it is not so. I can only say, I think the material errors are not numerous; and that the reader will, in such a labyrinth of difficulties, look rather for the information that is practically to be given, than for that ideal accuracy which is impossible for any individual, much less for a foreigner to attain. The French writers, I have consulted, gave me little or no assistance, where I had so much reason to expect it. *Monf. Pauton's* tables of the measures of land and corn, which contain those of some of the provinces, would lead us astray as often as they would guide us. By going through the country, I have found, from five to ten different measures in a province, where he has noted only one—I suppose the legal one of the capital cities.—It is surprising to read French books of agriculture, descriptive of some provinces in France, yet without an explanation of the contents of the measures named repeatedly in those works. Such omissions are totally inexcusable; for they
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render books useless, not to foreigners only, but to most of their own countrymen. But while accuracy is so difficult, not to say impossible, to be acquired under such circumstances, it is some satisfaction to consider, that the reader will here find the very interesting parts of the produce, rental, and price of land in that vast empire, ascertained upon a larger basis of enquiry, than can be found in any book hitherto offered to the public; my library abounds more with French georgical authors, as well as those branches of political œconomy which tend to elucidate such questions, than any other I have had the opportunity to examine; yet these books contain little else beside conjectures, loose and general ideas, and calculations without data, particularly in giving the gross produce of the whole kingdom. In a multitude of guesses some must, in the nature of chances, approximate the truth; but such have little more merit, and no more authority, than the wildest efforts of imagination; for enquiries of this kind are not to be made in the bureaux of great cities; books and papers will not afford the information: a man must travel through the country, or must always remain ignorant, though surrounded by ten thousand volumes. Neither is it travelling for other pursuits than will allow this knowledge to be gained; nor moving in public *voitures*, nor flying with rapidity from town to town; nor is it easy for one or two men, or even three to effect it; many should be employed for that purpose, and paid by government; for assuredly the object is of great national importance, particularly in the imposing of taxes; a business in which all the legislators that have yet arisen have gone so blindly to work, that their efforts in every country, and in none more than in France, cannot but excite a contempt of their ignorance and detestation of their injustice. To expect that men will be thus appointed and employed, and, above all, well chosen for the business, would be childish; governments are otherwise employed in every country. While, therefore, from the public nothing is to be expected, the private efforts of individuals are surely not devoid of merit; who, amidst great disadvantages, undertake a work of unquestionable utility.

DISTRICTS OF RICH LOAM.

Picardy.

This province has been, by so many French writers, extolled for its good and profitable cultivation, that I crossed it with my attention every where awake to discover such merit. I have already observed, in speaking of soils, that this is usually very good; the exceptions, where the under stratum of chalk rises too near the surface, as is the case about Berney, and more still at Flixcourt, are not of great extent, compared with the rich deep friable loams on a calcareous bottom. The nature of the country demands that I should consider it

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as one from Calais to the woods of Chantilly, where a poor country begins; and, though in the neighbourhood of Paris, it again becomes good, yet we should consider it separately. From Calais to Bolougne and Montreuil the good land lets at 24 liv. the journal or arpent of Paris, and the inferior at 12 liv.; the first is 11. 5s. per English acre*, which is a higher rent than similar land would produce in England, if rent only were considered; but our heavy tythes and poor rates being added do occasion nearly an equality. Near Berney the soil, and with it the rent, declines, rising from 8 to 12 liv. the arpent. It would be useless to add always the proportion per English acre; I just observed, that 24 liv. per arpent equals 25s. per acre; 12 liv. are palpably the half, and 8 liv. two-thirds of that. It rises to 24 liv. again at Ally-le-haut Clochers, where they reckon their wheat crops at 5½ louis, when corn sells high, this is 20 bushels per acre; and spring corn the same, which, on such land, is a miserable produce. At Flixcourt the chalk rises to the surface, and the rents are so low as 2 liv. to 5 liv. which would be much under the value, if they knew what to do with it, yet the country is not without sainfoin. At Picquigny rent regains the 24 liv. but at Hebecourt and Breteuil not more than 15 or 16 liv.; here they value wheat at 60 liv. the arpent, and spring corn at 30 liv. Near Clermont the land is good and the rent high, and from thence to Creil by Liancourt is a vale of exceedingly rich loam. The rent from Calais to Clermont is pretty regular, the best land 24 liv. the middling 15 liv. and the chalks 4 liv. to 8 liv. The produce of the first is about 24 bushels per acre, and of the spring corn 22. Landed property, upon an average, through Picardy pays 3 per cent.; but if bought with judgment and attention 3½, and in some cases 4. On the other hand, I was told that some estates did not return more than 2½, but this is rare. They have in general in France a very false idea of the good husbandry of this province: Mons. Turgot was not free from the error, when he named it in the same breath with Flanders†.

Isle of France.

In the country about Arpajon rents vary from 15 to 24 liv. and some capital arable lands are at 30 liv.; but here we enter upon a new measure of land, for the arpent of the Gatinois is 100 perch of 20 feet, or 40,000 feet, 24 liv. may be taken as the medium; in general in the Gatinois the good land is at 20 liv. and the ordinary at 10 liv.; at 20 liv. it is 16s. 9d. per acre. The product of wheat is stated at six septiers of Paris, of 240 lb. per arpent, which, if we attend to the French pound, is to the English as 1,0000 to 0,9264, and also as to measure equals twenty-three bushels per acre, spring corn thirty bushels. Within two leagues of Estampes there is much sand, the rent of which is 3 liv. 10s. and

* Wherever acre, quarter, bushel, gallon, &c. are named, English measure is implied.

† *Lettre sur les Graines*, p. 43.

4 liv. the arpent; this yields rye only; the good wheat land in the neighbourhood gives rent and produce as above noted. From hence through Toury, to the forest of Orleans, is part of the great plain called the *Pays de Beauce*, so much celebrated in France for its good husbandry:—it is, like all Picardy, fallowed for wheat, and consequently there is no good husbandry; but the soil is a rich loam on a white marl, and therefore, by fallow and dung, gives good wheat. I have three notes of the produce;—1, five Paris septiers per arpent; 2, twenty-one mines, each 60 lb.; 3, to the value of 100 liv. and spring corn 50 liv. The first is about $19\frac{1}{2}$ bushels; the second is 22 bushels; the third is the same nearly as the first: they agree tolerably well, and unite with what I saw to calculate the wheat produce at twenty-one bushels per acre. I saw no spring corn of any tolerable appearance. The rent is from 15 to 18 liv. per arpent, or 15s. per acre. Price 500 liv. that let at 20 liv. per annum (20l. 18s. 9d.) On my return to Paris, I crossed another part of this rich tract, in going from Orleans to Fontainebleau. I gained information at Shiloar, Denainvilliers, Malsherbs, and La Chapel la Reine: the intelligence was pretty uniform. Rent of the good land 20 to 24 liv. (18s. 5d.); of the inferior 14 liv. (12s.) Price 350 to 600 liv. The notes of the produce of wheat are not equally uniform; at Denainvilliers six to eight sacks, each 250 lb. this is thirty bushels an acre; oats four to ten sacks. At Malsherbs they assured me that wheat has been known, not uncommonly, to yield twenty-five mines, each four boisseau, of 25 lb. this is about forty-three bushels an acre; but they admitted that fifteen mines were much more common. At La Chapel good crops, eighty to an hundred boisseau, each 15 lb. or twenty-three bushels; also, that an arpent of wheat is commonly of the value of 90 liv. and oats of 50 liv. Passing the vast forest of Fontainebleau, which of course affords nothing to the present purpose, I renewed the inquiries at Meulan: the soil in that vicinity, and for some extent of country, consists of two kinds, which are distinguished by their productions, wheat and rye;—the wheat land lets at 18 liv. per arpent (15s. 2d.) and sells at 500 liv. (20l. 18s. 4d.) The rye soil lets at 6 liv. (5s. 2d.) and sells at 220 liv. (8l. 16s.) The arpent the same measure as hitherto, an hundred perch of twenty feet. The product of wheat is six septiers (twenty-three bushels) and of oats the same, that is three double septiers. A late writer states the common produce of ordinary land, in the environs of Paris, at two hundred gerbs or sheaves per arpent, yielding four septiers*. Passed Paris and its neighbourhood, by St. Denis to Liancourt. The rich vale which extends to Clermont, and which I mentioned before, some of which is arable, lets so high as 33 liv. the mine, or half an arpent of an hundred perch, of twenty-two feet, or 48,400 feet; this is 46s. English money and measure: much, however, is at 25s. or 35s. the acre, and 18 liv. more com-

* *Correspondance rurale*, par M. Bretonniere. Tom. II. p. 86.

mon; poor hills 3 to 5 liv. The wheat produce of these fine lands was stated to me at sixteen to eighteen quintals (hundred pounds), seventeen are equal to twenty-four one-half bushels an acre; but I know not how to think it possible that such a rent should be paid for lands which give no better produce, and yet the wretched appearance of the crops of spring corn late in autumn would seem to justify the calculation. Oats, they say, produce on an average fourteen quintals, which is the crop from land of half the value in England. The price of good arable in general 800 to 1000 liv. equal to 31l. 10s. an acre; but the best is higher. Estates pay $2\frac{1}{2}$ to $3\frac{1}{2}$ per cent. net; and considerable purchases, not being fold with equal ease, yield something more. This fertile vale passes Clermont, in the way to Beauvais, for at Brane I found land letting at 30 liv. and at Beauvais gardens at 80 liv. the mine; but there the chalk hills take up much of the country. From that place to Pontoise the features continue just the same: the hills sand stone loams, that let at 8 liv. the arpent of an hundred perch, of twenty feet, equal to 6s. 10d. the acre; but good loams at Marenne 16 to 20 liv. (20 liv. is 16s. 9d.) and produce six septiers of wheat (twenty-three bushels). At Commerle the soil is better; the hills let at 12 liv. and much good land up to 30 liv. (11. 5s. 1d.) where wheat also yields six septiers and oats eight. The price per arpent in this line is commonly 400 to 500 liv. (the latter 20l. 18s. 9d.); but near Pontoise there are lands that rise to 800 liv. at 600 liv. it is 25l. 2s. 6d. Returning to Paris, I took the road to Soissons, where is a continued line of noble sandy loams in this rich district. From the capital to Dugny rents are 40 liv. for the Paris arpent, or 2l. 1s. 7d. and sells at 1200 to 1300 liv. or 64l. 18s. 10d. At Dugny it lets at 24 liv. equal to 11. 5s. To Louvres and Dammertin it sinks to 20 liv. or 11. 9½d. and sells at 700 liv. (35l. 19s.) At the latter place the measure changes to one hundred perch at twenty-two feet. Rents there 32 liv. or 11. 2s. 4d. and the price 1000 liv. equal to 35l. Here wheat produces seven septiers, which is $24\frac{1}{2}$ bushels: not a good average crop for such a truly fertile soil, fallowed and receiving all the dung. They made a great boast of wheat rising sometimes so high as twelve septiers, or forty-two bushels: oats produce twelve sacks. At Nanteuil rents are 20 liv. equal to 13s. 2d. The price 5 to 600 liv. or 19l. 4s. 3d. and the product six septiers, or twenty-one bushels. Oats eight septiers. In the way to Villers Coterets rent sinks to 15 liv. or 9s. 10½d. and price to 300 liv. (10l. 3s. 8d.); and wheat to five septiers ($17\frac{1}{2}$ bushels). At Soissons rent 15 liv. price 400 liv. and product five septiers. To Coucy, hill and vale, one with another, rent 12 liv. and price 350 liv. At St. Gobin rent 12 to 15 liv.

Picardy.

At La Fere re-enter Picardy, but do not here meet with the arpent of the province. The measure eighty verge of twenty-two feet, 38,720 feet. Variations
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of measure now occur at almost every town. At St. Quintin they reckon by the septier of land being eighty verge of twenty-four feet, 46,080 feet; this space sells for 500 to 600 liv. or 20l. 1½d. What throws great perplexity into these inquiries here, is the payment or the reckoning of rent by corn. Thus they pay here four or seven septiers of wheat, each 60lb. and four of them making a sack, as rent for each septier of land. Suppose wheat, as at present, 20 liv. the sack, it is 5 liv. the septier, and if six are paid it is 30 liv. the septier. In some cases, but not all, this rent frees the land for the three years course of, 1, fallow; 2, wheat; 3, spring corn; in which case the 30 liv. become 10 liv. At La Belle Angloise the rent is three septiers of wheat per septier of land. The product twelve septiers on bad land, and twenty on good. On a farm of eight hundred septiers thirty-five horses are kept; on another, of four hundred septiers, there are twenty. This evidently makes the measure about an arpent, as well as the price noted above, and agrees also with the produce; hence the St. Quintin measure continues here of 46,080 feet,—but the septier of wheat cannot be the quantity of seed for a septier of land, which is uncommon. From hence to Cambray, the septier of land produces, on an average, six sacks of wheat, worth now 22 liv. the sack. And the rent is five septiers of both sorts of corn; this appears to be five septiers of wheat, or at 5½ or 27½ liv. and five of oats, which, at 10 sols the Paris boisseau, the present price is 1 liv. 7s. the septier, or for five 6 liv. 15s. in all 34 liv. five for three years, which is 11 liv. 8s. per annum; a rent very inadequate to the goodness of the soil and its product.

Flanders.

In the way from Cambray to Valenciennes, enter this celebrated province, which, among the French themselves, has the reputation of being the best cultivated in the kingdom. The difficulties, however, of gaining intelligence increased every step, for not one farmer in twenty speaks French; and all the way to Valenciennes, the confusion of measures, both of land and corn, makes the utmost circumspection necessary. The manco of land is sown with the manco of seed wheat, which weighs 80lb. being one-third of a Paris septier; the present price is 7 liv. 10s.—and of a sack, 22 liv. 10s. If they sow as we do, which, from their earliness, and the appearance of the young plant, I believe they do, this makes the manco two-thirds of an acre, which agrees very well with the measure I took by my eye of a piece, which I was informed contained six mancos of land, the rent, I was informed, was five to seven mancos of the corn produced, or the value per manco of land, six will be 480lb. of wheat, or two sacks 45 liv.; add 2 sacks of oats at 5½ liv. it is 56 liv. for three years, or 18 liv. rent per manco, which agrees well enough with the quality of the soil, and other circumstances of the country; it is 23s. 7½d. per acre. For the best land, the rent rises to eight manco of produce, this makes 11. 11s. 6d. Between Bou-

chaine and Valenciennes, end the open fields, which have travelled with me, more or less, all the way from Orleans. After Valenciennes, the country is inclosed; here also is a line of division in another respect. The farms in the open country are generally large; but in the rich deep low vale of Flanders, they are all small, and much in the hands of little proprietors. A fourth distinction also is in the husbandry; from Orleans, nearly to Valenciennes, the course is every where similar,—1, fallow; 2, wheat; 3, spring corn. But in Flanders the land is cropped every year. All these circumstances are sufficient to prove, that near Bauchaine is the agricultural division between French and Flemish husbandry; and it is to be noted, because the fact is curious, yielding much food to those political reflections, which arise in the mind on the contemplation of different governments, that Bouchaine stands but a few miles on the Austrian side of the old frontier of the kingdom. Hence the line of division, formed by these four agricultural circumstances mentioned above, and being a real division between good and bad husbandry, are found pretty exactly to agree with the ancient line of separation of the two states of France and Flanders. The conquests of the French, as every one knows, pushed their present dominion much further, but this does not obliterate the old divisions; and it is most curious to see, that the merit of husbandry forms, to this day, a boundary that answers not to the political limits of the present period, but to ancient ones, forming a line distinctly traced between the despotism of France, which depressed agriculture, and the free government of the Burgundian provinces, which cherished and protected it. The distinction certainly is not owing to soil, for there can hardly be a finer than much the greater part of the vast and fertile plain, which reaches, with scarcely any interruption, from Flanders nearly to Orleans, a deep mellow friable loam, on a chalk or marl bottom, capable of being applied in all the principles of the Flemish husbandry, by lying under the unprofitable neglect of open fields, and disgraced with the execrable system of fallowing, never found with any degree of regularity, but to the banishment of adequate product, profit, and improvement.

Passing Valenciennes, the flax lands of St. Amand present themselves: they speak of them, on the spot, as being the most celebrated in Europe,—and the accounts I received at several towns justified the report; but this subject being distinctly treated, I have only to observe, that a quartier of arable land, containing one hundred verge of twenty feet, or 40,000 feet, sells at 3350 liv. equal to 56l. 10s. 6d. and the rent is 36 liv. for the farm all round per quartier, or 11. 9s. 9d.—Another account I received, made the average rent of farms 30 liv. or 11. 6s. 3½d. and the price 1200 liv. (50l. 4s. 6d.) The product of wheat twenty-five to thirty-six measures per quartier, each 50 lb. Thirty such measures are equal (as the pound here is nearly the same as the English) to twenty-four bushels. Not a
great

great produce; but the land is better adapted to flax, than it is to wheat. At Orchies, repeating my enquiries, find, that land is measured by the centier, a square of one hundred feet, four of which make a quartier, and four quartiers a bonier. This is therefore the same measure as at St. Amand's. Rent in common 24 liv. the quartier, equal to 1l. 1s. but some at 30 liv. or 1l. 5s. 1d. And the price of land 1200 liv. the quartier, equal to 50l. 6s. The measure of wheat is the boiseau of 36 to 40lb. four of which make a razier or coup; they sow a boiseau of 40lb. on a centier of land:—this, proportioned to English measure, is 153 lb. to the acre, or about $2\frac{1}{2}$ bushels. They feed, therefore, nearly as we do. On so fertile a soil, they probably would not sow so much, but for the circumstance of all their crops succeeding some other, which will often necessarily make their season late. In the vicinity of Lille, rents are 36 liv. the quartier, or 1l. 10s. 2½d. Some not more than 24 liv. (1l. 1s. 1d.) The price 1200 liv. (50l. 6s.) To Bailleul, rent 24 liv. and price 3120 liv. the bonier, or 780 the quartier, or 32l. 13s. 3d. To Montcaffel, soil and husbandry both decline; the latter circumstance is remarkable. That excellent management I have admired so much in this province on the richest soils, should not extend, with proper variations, to the poorer, seems to indicate, that the general fact of the whole kingdom of France, extends, in some measure, even hither. Is the same fact found in the Austrian Flanders?—I shall always consider myself as ignorant in husbandry, till I have well viewed these provinces. In this line, from Lille to Montcaffel, there is a great deal of land, which does not let for more than 12 to 15 liv. the quartier, or 11s. 3½d.—To Berg I was informed, that custom has substituted a measure under the same denomination but one-fifth larger than what we have hitherto been guided by. Land sells at 900 liv. or 30l. 2s. 8½d.—rent 26 florins of 25/ or 1l. 7s. 7½d.—Here finished the notes of this journey; and as, in the following, I did not pass into Flanders, I shall make one or two observations appropriated to that province. In the following notes, the rent and the price were both minuted.

Price	1350 liv. —	Rent	36 liv.
1200	—	30	
1200	—	30	
1200	—	36	
780	—	24	
<hr/>		<hr/>	
5730	—	156	
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This proportion is scarcely $2\frac{1}{4}$ per cent. It is then to be considered, that the landlord has his own taxes to pay out of this, when, if he states his account, he probably will not receive more than two per cent. on his capital. This I attribute to the number of small properties, and the consequent passion of the people to become proprietors. They are induced to give more for land than it is worth,

and thus raise the price of that of all the country. The whole province is full of rich manufacturing and commercial towns; many persons in these are always ready to invest their savings in land, and to retire to the cultivation of it, circumstances which ought necessarily to have the effect of raising the price beyond the proportion of the rent. In the minutes of produce, there does not appear so great a superiority over other provinces, as the soil and excellent husbandry seem to imply; but it is to be remembered, that in other parts of the kingdom, a year's fallow, two year's rent, and all the dung of the farm go for wheat, which makes a moderate crop in Flanders yield more net profit to the farmer, than three larger crops in Picardy, or the Pays de Beauce, afford to the cultivators of those districts. Wheat is not here the only dependence; flax and cole-seed excel it: and beans, carrots, turnips, and a variety of products, receive the farmer's attention sufficiently to cover the whole country with cultivation every year: and where this is not the case, assuredly the products generally taken, and with them the net profit, will be much inferior. The second journey began in the same rich district, by passing from Calais to St. Omers.

Picardy.

At Recouffe, the price of the poorest land is 200 to 300 liv. the arpent of one hundred perch, of eighteen feet, or 12l. 19s. 9d.; but the best rises to 1000 liv. or 51l. 19s. 1d. and such lets at 30 liv.—In general rents are 15 to 20 liv. equal to 18s. 2d. the price proportioned. A good crop of wheat, on good land, rises to seven septiers per arpent, and is to be considered as extraordinary; common crops four one-half septiers, or twenty-three bushels. Beans yield eight septiers, or forty-one bushels; and oats produce eight to ten. It is plain, that this vicinity, on the borders of Artois, partakes more of that province than the miserable fallowing of Picardy.

Artois.

To St. Omers, price 800 liv. in the vale, and 600 liv. on the hills; rents in the vale 15 to 18 liv.—and on the hills 12 liv.—Oats yield sixteen raziers, each 120lb. of wheat. Near Aire, the price of the best land 1500 liv.; rent 30 liv. and some even to 36 liv. But much sold at 600 liv. and from that price to 1000 liv. Lilliers to Bethune, an Artois measure of good wheat is worth 200 liv. but this is not general. To Doulens, price 600 liv.; and rent 12 liv.—Here we re-enter

Picardy.

At Beauval, the price per journal is 700 liv. (25l. 19s.) Good wheat produces ten raziers of 180lb. (thirty-one bushels.). In passing from Poix to Aumale, the chalk land sells at 240 liv. (12l. 19s. 4d.) Better lands 500 liv. (25l. 19s. 6d.) and the rent 16 liv. (16s. 7½d.).

Normandy.

Normandy.

Near Aumale enter this province, where the measure of land is the acre of an hundred and sixty perch, of twenty feet, or 64,000 feet. Arable here sells at 800 liv. (21l.); rent, 24 liv. to 30 liv. (14s. 10½d.) Wheat produces to the value of 100 liv. to 120 liv. (2l. 12s. 10d.) Oats, 60 liv. to 70 liv. (1l. 12s. 3d.) In passing from Neufchatel to Rouen, price of good arable, 700 to 800 liv. (19l. 13s. 8d.) Open fields, 400 liv. (10l. 10s.) About Rouen, much at 40 liv. (1l. 1s.) and price 1200 liv. (31l. 10s.) Estates in Normandy, pay 3 per cent.—From Rouen cross the Pays de Caux to Havre. At Yvetot, price 1000 liv. (26l. 5s.) and rent 35 to 40 liv. (19s. 7½d.) At La Botte, rents rise from 30 to 50 liv. (1l. 1s.) But at Havre, where I had opportunities of being very well informed, I understood that the whole Pays de Caux, on an average, let at 50 liv. (1l. 4s. 3d.) that the taxes deducted 10 liv. (5s. 3d.); and that the net rent was, to the landlord, 40 liv. (1l. 1s.) the price 1200 liv. (31l. 10s.) consequently, making about 2½ per cent. The produce of wheat, upon these noble soils, it is not more than thirty to forty boisseau, of 50lb. per acre (thirty is sixteen bushel) and forty-five or fifty a large crop. Of Oats, they get fifty such boisseau. Shameful products! This for the great mass of the country, here and there are to be found crops something better. I must, upon this, observe, that the whole Pays de Caux is a manufacturing country; the properties usually small; and that farming is but a secondary pursuit to the cotton fabric, which spreads over the whole of it. Wherever this is the case, we may take for granted, that land sells much above its value; for there is a competition to get it, that arises from views distinct from the produce which it is expected to yield. And we may also be equally assured that, in such cases, the soil is badly cultivated, and produces little, on comparison with what mere farmers would make it do. There wants no inquiries into products in the Pays de Caux; the appearance of most I saw was miserable, and such as proved the land to be in an execrable system of management; yet was this the country to which several gentlemen at Paris referred me for examining the immense benefits to agriculture, from manufacturers spreading over a whole country, but of this question more in another place. I will only observe here, that wherever this effect takes place every possible effort should be applied to convert the whole country to grass, in which state even manufacturers can hardly hurt it; and let it always be kept in mind, that it is not the price, but the product of land, that a politician should regard. Crossing the Seine at Havre, and passing from Honfleur to Pont au de Mer, rents are from 20 to 40 liv. (13s. 1½d.) Enter here the rich pasturages, or grazing lands, of the Pays d'Auge, of which the valley of Corbon is the most famous, and classed with the finest in the world; the best here sold at 2000 to 3000 liv. (54l. 13s. 9d.); let at 70 to 100 liv. (1l. 17s. 2½d.); the price of others, not equally good

good, 1200 liv. (26l. 5s.) and to 1500 liv. (32l. 16s. 3d.); on the hill sides there are some at the same price of 1500 liv. and that let at 50 liv. (1l. 1s. 10½d.); woods here sell at not more than 600 liv. (13l. 2s. 6d.). Examine a pasture, that was sold at 3000 liv. (65l. 12s. 6d.), in the way from Lisieux to Caen. In the valley of Corbon, reckoned to contain the richest pasturages of Normandy, they have been sold so high as 4000 liv. (87l. 10s.), which were rented at 200 liv. (4l. 7s. 6d.), these prices of the acre, measured by the perch of twenty-two feet: some confusion, however, is always found in reports, owing to their using also the perch of twenty-four feet, which gives 92,160 feet in an acre; if attention is not paid to this variety of the Norman acres, errors may be the consequence. Rent of the arable land, for some miles from Lisieux, 30 liv. to 50 liv. (17s. 6d.). Caen to Falaise, rent 20 liv. to 40 liv. average 25 liv. (10s. 11¼d.). To Argentan rent 35 liv. (15s. 2d.); they sow five boisseau of wheat, each 40lb. equal to 110lb. English per acre, and they reap fifty such (18 bushels) an acre. Estates pay four per cent. being now, 1788, at 24 years purchase. Woods in general through Normandy yield 20 liv. but these, I believe, are measured by the national, and not by the provincial measure. About Isigny the salt marshes let at 100 liv. (2l. 3s. 9d.); arable 50 to 60 liv. (1l. 4s. 3½d.). And to Carentan the marshes are 40 liv. the verge of 40 perch, of 24 feet (2l. 18s. 4d.), some so high as 60 liv. (4l. 7s. 6d.) At that place rent 40 to 50 liv. (3l. 5s. 7½d.) but much at 30 to 40 liv. (2l. 11s. 0¼d.). If a farm in this vicinity cost 10,000 liv. it will commonly let at 400 liv.; the price of arable 700 liv. (30l. 12s. 6d.). At Nonant come again to the common Norman acre, arable sells at 800 liv. (17l. 10s.). The rent of which is 40 liv. (17s. 6d.); but in general the price is 500 to 600 liv. (12l. 7½d.); pasture sells at 1200 to 1500 liv. (29l. 10s. 7½d.). Again entering this great province from Maine at Lessiniolle wheat produces 20 to 40 boisseau of 60lb. (16½ bushels.). In the vicinity of Bernay, there is some of the finest arable land to be seen in the world, which lets at the low rent of 50 liv. (1l. 1s. 10½d.). The produce of wheat on it 250 to 300 gerbs of six per boisseau of 90lb. (37 bushels); but not so high on an average. At Brionne, the rent of fine arable is 60 liv. (1l. 6s. 3d.). And here also wheat has yielded so high as 45 to 50 boisseau, which equals the Bernay crops. It is to be noted, that these rents are those of farms on an average of all their lands, some of which are not equal to those noble soils, which hardly have an equal. Near Louviers, the rich arable vale lets at 50 liv. (1l. 1s. 10d.) to 80 liv. (1l. 15s.). Passing the poor lands to Rouen, and by the chalk hills to Vernon, cross the country to La Roche Guyon, where we come once more to the arpent de Paris; good arable sells at 600 liv. (31l. 3s. 4d.) but in general, at 400 liv. the rent 20 liv. (1l. 9½d.) and estates pay in common 3 to 3½ per cent. In the rich plain of Magny, the rent is 20 liv. and the product of wheat,

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on the best land, rises, in a good year, to eight septiers of 240lb. but in common six (thirty-one bushels) on good land. Return to Rouen, and again cross the Pays de Caux to Dieppe, having my former intelligence confirmed in every particular concerning the rent and price of land in that celebrated district. And as I here quit Normandy, I may, in general, observe, on that noble territory, which is considerable enough for a kingdom, rather than a province, that its character, for husbandry, is very much mistaken in France: before I viewed Normandy, I heard it represented as a very finely cultivated province. Nothing too great can be said of the rich pasturages which are applied in fattening bullocks to the highest advantage, except in the article of the breed of the sheep that are found amongst the cattle. They ought to be large, and bearing long combing wool; except this point, their herbages, as they call them, are very well managed, and no want of capital appearing among them. But as to arable land, I did not see a well cultivated acre in the whole province. You every where find either a dead and useless fallow, or else the fields so neglected, run out, and covered with weeds, that there can be no crop proportioned to the soil. A finer soil, than this province in general possesses, can hardly be seen, and would yield a very different product from what is found on it at present. The best lands, says Mons. Paucton *, in Normandy, yield but a little above six fold; the less good, or middling, but five, and the greatest part only four fold.

Isle of France.

In my third journey, I entered ground new to me, in passing from Paris to Guignes. About that place rents are 15 to 20 liv. the arpent de Paris (18s. 3d.). At Nangis, the best arable is 15 liv. (15s. 8½d.); middling 12 liv. and the worst 8 liv. Wheat produces, upon the best, five septiers, or twenty-five bushels in a good year; that of the middling land four septiers; and of the worst three. From Columiers to Meaux rent 20 liv. (1l. 9½d). At that district, and Neufmoutier, they measure by the perch, of twenty-two feet, or the arpent de la France. Rent 40 liv. (1l. 8s.) for great tracts together, and for small ones 50 liv. and even to 60 liv. (2l. 2s.): and I heard that some pieces have reached 100 liv. (3l. 10s.) the highest rent I have heard of in France for arable land; the soil, however, is amongst the finest to be met with in the world. Such of these soils, as let commonly at 40 liv. sell for 15 or 1600 liv. (54l. 4s. 11¼d.). In regard to products, wheat, on the best land, gives ten septiers (35 bushels), and fifteen are known † (52½ bushels.) But the common produce is seven, tythe deducted (24½ bushels), much below what it ought to be on this land, which in Eng-

* *Metrologie.* 4to. 1780. p. 610. The passage is a strong confirmation of my notes.

† It is asserted, that on the farm of Puiseux, near Meaux, M. Bernier, farmer, reaped twenty-two two-fifths septiers, or above seventy bushels. *Recherches sur la Houille d'Engrais.* t. 2. p. 5.

land,

land, I am confident, would not give less than 32 bushels on an average, without any fallowing. I estimate the crops I viewed on the farm of Mons. Gibert at 36 bushels an acre on an average. But as to the spring corn all is, soil considered, miserable. I saw none that would reach forty bushels an acre; it ought, in a good course of crops, to produce eighty.—As here terminate my notes on this noble district of rich loam, the finest plain in Europe, Lombardy only excepted, for all the level of Austrian Flanders and Holland are parts of it, I shall draw, into one view, the various minutes of rent, price, and product of wheat—it is useless to name spring corn, for it is every where really contemptible, except in Flanders, and there the quantity cultivated is not considerable.

Average*,—Rent, 1l. 3s. 10d. Price, 29l. 13s. 3d. Product of wheat, 23½ bush.

The average of twenty-six articles, where both rent and price are noted, is, rent, 1l. 1s. 5d. price, 31l. 5s.

PLAIN OF THE GARONNE.

This district, though of no such extent as the former, is one of the richest in the world. The soil is very fine, but not equal, I am inclined to think, to the deep loams of Bernay, Meaux, and Flanders. In climate, however, it far exceeds the northern territory. This is so superior, that the products of every kind are much more exuberant, and more valuable, even on inferior soils; and the tracks which, in the north of France, would be under sheep-walk or wood, are here covered with vines, that yield as rich crops as the most fertile spots of the vales themselves. As I treat of that branch of culture in a separate chapter, no notice is taken of it in this; a point essential for the reader to have in his contemplation, as he examines the sums here minuted.

Quercy.

The measure of land is the cartonat, which contains 19,100 feet. In passing from Creiffenfac to Souillac, meadow lets at 30 liv. (2l. 12s. 6d.); the price of arable 400 liv. (35l.) and the rent 10 liv. (17s. 6d.) Advancing to the Dordogne the cartonat changes its contents to 30,000 feet; rent of arable here 10 liv. (11s. 3d.) and some higher. At Pellecoy they reckon by the festerée, which sells from 100 to 300 liv. but meadows in valleys up to 1200 liv. At Caussade the rent of a cartonat is a quartier of wheat, of 150 lb.; reckoning wheat at 20 liv. the septier of 240 lb. this is 12½ liv. (13s. 9d.). To Montauban, we heard of the arpent once more, though not the common measure of the country. That of an hundred perch, of twenty-two feet, sells from 800 to 1000 liv. (31l. 10s.) and the rent of such land is 35 to 40 liv. (1l. 6s. 2½d.) At Pompion, the price of ordinary land 400 liv. (14l. 8s.); but of rich 800 liv. (28l. 16s.) From

* The articles of 4l. 7s. 6d. and 80l. 4s. 2d. not included.

thence to Tolouse, I passed through the finest plain of wheat I have ever beheld, the space at many views very considerable, and promising to the eye to produce full five quarters of English per acre on an average. From Tolouse to Nohe, an arpent 400 liv. (14l. 18s.) At Ourooze meadows 600 liv. the journal; some arable so low as 100 liv. In returning from the Pyrenees northwards, I entered this rich district again between Fleuran and Leitour, and here met with a new measure, the cuzan, which sells at 1000 to 1200 liv.—and there are that rise to 3000 liv. Near Leitour, the cuzan sells for 3200 liv. Towards Estafort, they measure land by the sack, being the quantity sown with a sack of wheat of 145 lb. good land to 600 liv. The vale from Estafort to Port de Leyrac, contains much admirable land. It sells at 3000 liv. the carterée. I was much perplexed to discover the contents of the carterée, and especially as they are not regular in the quantity of seed, sowing in some places two quartiers or sacks, each of 145 lb. and in others only $1\frac{1}{2}$: I am, however, from comparing the various circumstances with M. Paucton's measure of Agen, in this immediate vicinity, inclined to calculate the carterée at 70,000 feet, at that measure 3000 liv. is 72l. 5s. 9d. Wheat produces 33 sacks of 145 lb. on the best land, and in a good year, (40 bushels.) We were shewn a field that had produced 48 sacks ($57\frac{1}{2}$ bushels.). In this reduction, I attend to the weight of the country, which is here not *poid de marc*, but *poid de table*. In the vicinity of Agen, the common price is 2000 liv. (48l. 4s. 2d.) The product of wheat is 30 sacks (36 bushels.) Hemp yields ten quintals on the same carterée, at 40 liv. the quintal. Rye land, of which there is some on the hills, sells at 1000 liv. (24l. 2s. 1d.) At Port St. Marie, common price 2000 liv. (48l. 4s. 2d.) At Aguillon the price of the best land 4000 liv. (96l. 8s. 4d.) much at 3000 liv. (72l. 5s. 9d.) Wheat here yields twenty for one of the seed. I was shewn a small field, that was twice fold for 3000 liv. I stepped it carefully, and made it 3600 square yards, which ascertains the price per English acre to be (155l. 17s. $3\frac{1}{2}$ d.); but it is close to the town, though never used for a garden. The same piece has often produced in wheat twenty sacks of 125 lb. this is forty-nine bushels. It is remarkable, that they sow but one-third of a sack on it, the produce being sixty for one. It is under a bushel an acre English. At Tonneins the price of a journal, which, by Mr. Paucton, is to the arpent as 0,9516 to 1,0000, is 1000 to 1200 liv. (80l. 4s. 2d.) To La Motte Landron, the very worst land in the country bears the price of 400 liv. the journal (20l. 6d.). In one stage farther we are plagued with a new measure, as it has been so often in this district, it is here 150 perch of 15 feet, or 33,750 feet. The general rate is 1000 liv. (50l.) and much rises to 1500 liv. (75l.) They sow this measure with a sack of 140 lb. of wheat, which is about $2\frac{1}{2}$ bushels: the product from 16 to 20 sacks (43 bushels.) They plough one of these journals in a day with a pair of oxen. Advancing to-

ward Langon, the poorest land is 500 liv. (25l.) In general from 1000 to 1500 liv. (62l. 10s.) They sow a sack per journal, and reap twenty. At Castres the price of a journal, of thirty toises by seven, is 300 liv. (56l. 15s. 7½d.) And passing Bourdeaux and the Garonne, in the way to Cubzac, we find the journal changed again; it is to the arpent of France as 0,6218 is to 1,0000; the price of arable 500 liv. (27l. 17s. 2d.) Wheat produces eight sacks of 180 lb. each (31 bushels.) They sow three-fourths of a sack. At Cagnac rich land sells at 1600 liv. (89l. 4s. 11½d.) but they have also some so bad as to be worth no more than 100 liv. (5l. 11s. 6½d.) From hence we enter another district, and it will not be improper to pause for a moment, and review the intelligence received in this region of uncommon fertility; premising, however, that the principal feature of the whole is vines, which do not come into the present enquiry, but add immensely to the products, rendering the inferior soils almost equal to the best.—Average,—Price, 51l. 10s. Product, 37 bushels*.

It is to be observed, that the reason why a money rent is so seldom minuted, arises from the land being generally at half produce, consequently no rent in money can be ascertained; but this is not the sole reason, it results also from small properties being very numerous in the vicinity of the Garonne, to which circumstance we must have recourse for explaining some of these prices. Land always sells beyond its value where there is much competition for small parcels of it, as we have found in other districts, and the fact will often occur. From the price at which these lands sell, their prodigious fertility may be imagined. At Aguilon I was assured, that they have many fields that have produced what I calculated on the spot to be equal to 9l. sterling per acre in wheat, and 15l. in hemp, yielding no other crop but those valuable ones in the rotation, 1, hemp; 2, wheat. If the average of the twelve minutes from Port de Leyrac to Castres be taken, it amounts to 70l. an acre, for a line of between fifty and sixty miles. I am inclined to think that the richest ride and most flourishing country in France, for the eye of a traveller to command, as he keeps the great road, is that from Bourdeaux to Montauban and Toulouse. Parting from the noble city of Bourdeaux, equalled by very few in the world for commerce and beauty, the magnificent river Garonne, alive with inland trade; one of the most fertile vales in Europe; the hills covered with the most productive vineyards to be met with perhaps in the world; the towns frequent and opulent; the whole country an incessant village, and all gilt and invigorated by a genial sun. He who has not viewed this animated scenery has not seen the finest thing in France. Flanders, with all its fertility of soil, has the foggy climate of the N. and yields a *coup d'œil* every where flat and *sombre*, nor are her productions, flax excepted, of equal value.

* Rejecting the articles of 155l. 17s. 3d. and 5l. 11s. 6d. and also the produce of 57½ bushels.

Plain of Alsace.

I entered this rich plain at Wiltenheim, where the measure of land is one hundred verge, at twenty-two feet; the price from 1500 to 2000 liv. (61l. 5s.) Good wheat crops twelve sacks of 190lb. (thirty-three bushels). Poppies are much cultivated here as well as in Flanders and Artois; they yield six sacks, at 30 liv. a sack (61. 6s.) The wheat of the year through this country I should guess, from its appearance, at three and a half quarters per acre, and the barley at five. From hence to Strasbourg is by one of the richest and best cultivated plains to be seen, crowded with crops in endless and quick succession. Land not immediately contiguous to that city, designed for gardens, but not planted, sells at 2000 liv. the arpent of 24,000 feet (138l. 5s. 1d.) Arable land in general, and it appears to be almost all so, 600 to 800 liv. (48l. 9s. 9½d.); on such land wheat yields four sacks of 180lb. (20 bushels) which is inadequate to the soil; barley and beans six sacks. They sow 60 lb. of wheat (100lb.), and half that quantity, by measure, of beans. Estates here, as in all the rich districts where the division of property is great, pay but little interest for money, in general 2½ to 3 per cent. About Benfeldt the price of land rises to 1200 liv. (58l. 6s. 8d.) and lets at 24 liv. on an average (1l. 3s. 4d.), but this is farms through, one with another. Estates pay no more than 2½ per cent. At Schelestadt the average price of arable is 300 liv. (14l. 11s. 8d.), but there are some pieces that rise to 1000 liv. (48l. 12s. 2½d.) Wheat yields five sacks of 190lb. (twenty-five bushels); barley six; beans six to eight; and maize five to six. Upon the whole, this plain of Alsace, though the soil is exceedingly fertile, and the cultivation very excellent, is not so productive, with a much better climate, as Flanders, and not comparable to the Garonne; it is, however, proper to observe, that I was not in the part of the province where hemp is a principal article of culture, for which it is famous; there I should probably have found the lands more productive. On an average good land may be reckoned at 50l. per acre.

Plain of Limagne.

Amidst the mountains of the province of Auvergne, which are mostly volcanic, there is a small but level plain, which some of the French naturalists think was once a lake, and some, who seem to have more probability in their supposition, that it is the gift of the river Allier that runs through it, having washed from the great region of mountains, from which itself and its kindred streams flow, that rich mud or sediment of which this plain, to a considerable depth, is formed. I was shewn some places where the river seemed, even to the eye, to be in the act of raising its bed by depositions of mud, which in the memory of man has formed solid ground. It is not wonderful that a plain of this nature and origin should be of extraordinary fertility; it was represented to me as by far the most

fertile district in all France, and it will remain a question whether the idea be not a just one. I entered this beautiful plain at Riom, from whence to Montferrand arable sells from 1000 to 1200 liv. the septerée of eight hundred toises (64l. 3s. 4d.); some lands are known to have been sold even for 4000 liv.; and to Clermont the average of arable lands 800 liv. (46l. 13s. 4d.), much rising higher. Meadows near Clermont sell to 1500 liv. the arpent of six hundred toises (116l. 13s. 4d.); the medium of meadows is 1200 liv. (98l. 6s. 8d.); the rent 50 liv. (3l. 17s. 9½d.) and that of arable 30 to 40 liv. (2l. 14s. 7½d.) The produce of wheat from seven to ten times the seed, which, for the land, is nothing at all; but I met afterwards with something of an explanation, that the best lands are too rich for that grain, giving little beside straw; for which reason they sow rye on the best soils, and wheat only on the worst:—barley gives fifteen seeds. From Vertaizon to Chauriet price 2400 liv. for eight hundred toises (140l. 12s.) At Izoire and its vicinity good arable 800 liv. the septerée of eight cartonats, each one hundred and fifty toises, 43,200 feet (31l. 2s. 4d.); bad arable 400 liv. (15l. 11s. 1½d.); watered gardens and hemp grounds 2000 liv. (79l. 5s. 9½d.); watered meadows 1200 liv. (46l. 13s. 5½d.) but these, if also planted with apples and well inclosed, will yield 2000 to 3000 liv. (97l. 12s. 3d.) The septier of wheat is eight cartonats, each of 32lb.; of these they sow six of wheat (173lb.) and they gain forty-eight (23 bushels); of rye they sow six cartonats also, and they gain sixty (29 bushels); of barley they sow eight and get sixty-four of the same measures; of oats they sow eight, and the crop is eighty (which is about seventy-two of such measures per acre, or more than thirty-six bushels); and in their tillage they keep eight working oxen to one hundred septerées of land. In this plain of Limagne, which, by the way, never reposes in a fallow, we are to regard the price at which the land sells. Cultivation is so ill understood here, and I saw such execrable ploughing, that I am clear the products of common crops are not by half, certainly by one-third, equal to what they ought to be, except in cases of meadow, hemp grounds, gardens, or orchards, in all which the management is excellent, and the produce adequate to the soil and culture. The price of the land rises very high indeed; the best arable may be calculated on an average at about 60l. One circumstance demands particular attention, relative to the Limagne, which is its situation being cut off from all immediate connection with the sea, any inland navigation, or any great city*, or even any considerable manufacture, for the fabrics of Auvergne are of no account. It is a circumstance from which political conclusions may be drawn, that agriculture is here able to support itself without

* I have read of apples being sent from Auvergne to Paris for sale; it may be so, but the observation in the text is little affected by it; they must be particular sorts to supply, at a high price, the demand of luxurious consumption.

the aid of any of those assistants commonly supposed to be so essentially necessary to give a value to landed property.

Upon these four principal districts of the fertile plains of France, to dwell on general observations would be useless; I shall not, however, quit them without remarking the similarity which may be found between them, distant and unconnected as they are with relation to each other.

In the chapter of the general produce of France, it appears, that the proportion of these plains to each other, is as follows:—District of the N. E. 57.—The Garrone 24.—Alsace 2.—The Limagne is not equal to 1.—I mention them here, not to draw an average of the whole, because I do not conceive the *data* to be ample enough for that: but to caution the reader against supposing, that a proportion of the plain of the Garonne, equal to twenty-four in this table, is of the value of 5*l.* 10*s.* per acre. My journey was so much on the richest part of that plain on the river, that the soil is, beyond question, superior to what it is on an average, of so large an extent as the number twenty-four here marks.—The same objection does not hold in relation to the north eastern district, which is more equal: *that* may very generally be averaged at about 3*l.* an acre: and the *better parts* of the plain of the Garonne, at 5*l.* 10*s.* The good land in Alsace at 5*l.* and in the Limagne at 6*l.* And when it is considered that these plains, including the Bas Poitou, amount to twenty-eight millions of acres; that is, to a larger extent, by about a fifth, than is to be found in the kingdoms either of Scotland, Ireland, or Portugal—a fact which must necessarily give us a very high idea of the natural fertility of this noble kingdom, as well as of the internal wealth that supports such immense tracks of land, at so vast a price. -

DISTRICT OF HEATH.

It is absolutely necessary to explain one circumstance to the reader, without which, he would form a very erroneous judgment from the following notes:—The title of *heath* is not unaptly given to the countries I now treat of. The quantity of actual waste, producing heath or ling (*erica vulgaris*), is immense; and independent of this, the general aspect of the country presents a widely spreading gloomy view from vast tracks of cultivated lands having been exhausted and abandoned to spontaneous growths. In such countries, the real average rent, or value, or produce, is not to be attained. Converse with any person on the topics of agriculture, and you will always find him referring to the land actually profitable at the present time, of which there are every where tracks that never are abandoned, and which bear a value that has nothing in common with the country in general. Sometimes, with difficulty, I got precise ideas of the price, &c. of the wastes, but these notes I shall give under the head of waste land,
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a very important article, and highly deserving the attention of such as wish to cultivate the most profitable fields of French agriculture. Normandy, notwithstanding its general fertility, has a large district contiguous to the western coast, which, though much better than Bretagne, has more resemblance to it than to the richer parts which we have described; I therefore unite them here. This district is entered before Vologne, in the road to Cherbourg. At Carentan, there are some rich pastures, but none afterwards, and a decisive change of soil.—Rent 5 to 6 liv. (8s.); but good land to 15 liv. (1l. 1s. 10d.). Carentan to Pery, 5 to 10 liv. (10s. 11½d.). Coutances to Granville 12 liv. (17s. 6d.).

Bretagne.

From thence, in the way to Doll, enter this province. The price of good land 500 or 600 liv. (19l. 12s. 9½d.) the journal of two Norman verge, or 46,080 feet. Bad land, but cultivated, price 300 liv. (10l. 18s. 9d.); the good lets at 25 liv. (18s. 2½d.); product of wheat 20 boisseau of 72lb. (20 bushels.). From Hedé to Rennes rent of middling land 10 liv. (7s. 4½d.); but some rises to 20 and 30 liv. (18s. 2½d.); sells at twenty-five years purchase, and pays 5 per cent. At Rennes, and its vicinity, rents, near the town, 50 liv. (1l. 16s. 5d.). At a distance commonly about 12 liv. (8s. 9d.) but some to 30 liv. 1l. 2s. 1d.). Wastes, *landes*, to be had for ever at 10*s.* Of wheat, they sow five boisseau of 40lb. (166lb.). Of buck-wheat, they sow one one-half boisseau, and gain thirty-two. At St. Brieux spots near the town, of very rich land, sell at 2000 to 3000 liv. (91l. 10s. 5d.) and let at 80 to 100 liv. (3l. 5s. 7½d.). Wheat, on such land produces up to 90 boisseau, of 40lb. (50 bushels). Price at a distance from the town 300 liv. (10l. 18s.); and lets at 12 liv. (8s. 9d.). At Morlaix improved land lets at 20 to 30 liv. but the rough wastes are thrown into the bargain. At Brest I was informed, that the bishoprics of St. Pol de Leon and Tragner do not, on an average of cultivated land, let at more than 12 to 15 liv. (9s. 7d.); but they have good land that rises to 20 and 24 liv. (15s. 10d.). Three-fourths of all Bretagne waste, and half of those bishoprics, which are the richest parts of the province. At Rosporden they have meadows, in their waste country, that let at 24 liv. (17s. 6d.) and that sell at 600 or 700 liv. (24l. 13s. 11d.); but large tracks cultivated, that would not yield more than from 100 to 150 liv. (4l. 11s. 1d.). At Quimperl no rent per journal known; farms are taken in the lump, rough, waste, and good land. In the neighbourhood of Mufilac the best improved meadows sell at 1500 liv. (65l. 12s. 6d.); almost incredible in a country where wastes are to be had at 10*s.* capable of yielding sainfoin and other grasses. At Auvergnac wheat yields eight septiers of 240lb. (26½ bushels); but this is on good land, and a fine crop; average five septiers. Meadows sells at 1200 liv. (43l. 15s.); but arable not more than 400 liv. Estates pay 5 per cent.; and some more. Of thirty-nine parts of Bretagne, twenty-four are waste. Ar-
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rive at the great city of Nantes, near which rents are 60 liv. (2l. 3s. 9d.); but at a distance 20 to 30 liv. (18s. 3d.) I cannot quit this immense province of Bretagne without remarking, that in most circumstances it wears a singular aspect. The products, which are not to be collected so much from these notes, as from a general idea formed from having viewed it, are contemptible; and the tolerable rent which appears in some of these minutes, with the immense value put upon scraps of very good land, as at Brioux, and every where for good meadow, are all three equal proofs of the poor and miserable state in which agriculture is found throughout this province, St. Pol de Leon alone excepted, where are some exertions that mark a better spirit. But the circumstance of half a province being waste, and to be rented for ever at 10 *l.* a journal, of near five roods English; which is every where maritime, abounding with ports and commerce, and having in it the royal ports of Brest and l'Orient; the great city of Nantes, and the very commercial one of St. Maloes; containing in its bosom one of the greatest linen manufactures in Europe; enjoying privileges and freedom from taxation beyond any other province; and yet, with all these palpable advantages, which ought to give the greatest activity and vigour, according to received ideas, the whole forms a picture of misery hardly to be equalled in the whole kingdom, in point of a contemptible culture. The *triste* and wretched Sologne is, I think, superior. It is necessary that this fact should be in the reader's contemplation, while he reflects on the produce, rent, and price of land in Bretagne; but the developement of the circumstances, that cause so extraordinary a spectacle, will be treated of, when I attempt to explain the political principles that have governed agriculture in France.

Anjou.

There is not much distinction between this province and the preceding; the quantity of heath and wastes is immense, but it has not, in the line I travelled, so *sombre* and neglected an appearance. In the neighbourhood of Angers and Mignianne, the measures are the arpent of Anjou, which contains an hundred cords of twenty-five feet, or 62,500 feet. But the journal is more commonly used, which is eighty of these cords, or 50,000 feet. Of wheat, they sow eight boiseau of 28lb. (172lb. per acre); and get forty-eight (17 bushels). At Duretal, rye land sells at 100 liv. the boiselee. From thence to Le Mans, there is such a mixture of heaths and wastes to so great an extent, that what I have to offer concerning it will come in more properly under the head of waste lands.

Gascogn,

I ought not to begin the detail of this district without observing, that as a considerable part of it is within what may be called the roots of the Pyrenees, which consist of rough tracts of mountains, intersected by rich and cultivated vallies,

vallies, the prices minuted will have, as in many other cases, a reference more to the latter than to the former; the generic term, land, will always be applied to those fields in the contemplation of the person that speaks; as for waste mountains it is, when let, thrown into the bargain. The prices may run apparently high, and yet the country, taken in general, not a tenth part cultivated. At the famous valley of Campan and near Bagnere they measure by the journal of seven hundred cannes, each canne eight pann of eight inches. Land in culture sells on the hills at 300 or 400 liv. (30l. 12s. 6d.); in the country between Bagnere and Lourd the journal of arable sells at 240 liv. (24l.) Maiz here is worth 40 liv. the journal (3l. 10s.) Such land lets at 15 liv. (1l. 6s. 3d.); and the soils that yields and lets at those sums, sells at 300 liv. (26l. 5s.) paying 5 per cent. At Lescu the arpent sells in the vale at 500 liv. From Pau, in Bearn, to Monen, an arpent that is sown with four measures each of 36lb. sells for from 300 to 400 liv.; this may be calculated, without apprehension, about an English acre (15l. 8s. 3d.) From Navareen to Sauveterre the same measure by seed continues; wheat produces forty measures, which, if my conjecture is right, equals twenty-four bushels per acre; in general twenty-seven (sixteen bushels.). Maiz, from half a measure of seed planted at two feet square, yields sixty measures; the price now, 1787, is 54*s.* to 55*s.* but in common varies from 18*s.* to 30*s.* In the vale an arpent sells at 500 liv. (21l. 17s. 6d.) but near towns to 800 liv. (35l.) From St. Palais to Anspan there are vast fern wastes, which the communities sell; afterwards, when cultivated and sold by the proprietors, the price is about 300 liv. (26l. 5s.) Passing Bayonne I met, at St. Vincent's in the Landes, some difficulties in ascertaining what their arpent was. They sow four measures of rye, each of 36lb. and a pair of good oxen plough two arpents a day, which in this light sand, and with their double breast plough in ridging, agreed well enough with the seed rye. At last I was shewn a garden that contained just an arpent; on stepping I found it 3366 square yards, whence it appears that their rye is sown exceedingly thick. Pine land, which is here very bad, sells at 60 liv. the arpent (3l. 16s. 1d.). It must not be imagined from hence that the pine land of the Landes of Bourdeaux sells in this proportion in general. Vast tracks are greatly preferable to these, and, if well planted, yield from 10s. to 20s. per acre, and sell at 10l. to 20l. an acre, but usually 12l. or 13l. Cultivated land 120 liv. (7l. 12s. 2d.) Maiz yields thirty measures per arpent, or forty-three measures per acre. The produce of rye the same, twenty-six bushels; but this is a great crop. At Tartas inclosed and cultivated land sells at 300 liv. (18l. 18s. 10d.) the best at 400 liv. but that is uncommon. At St. Severe 500 liv. (33l. 10s.) It is ever thus; when a country like this is in general waste, and the cultivated spots rich, they sell them as they would do in districts the whole of which are in culture. About Aire the arpent sown with

240lb.

240lb. of wheat, that is, with two sacks, each four measures of 30lb. sells at 1000 liv. If they sow 150lb. per acre, this is 27l. 16s. 10d. To Plaisance at 600 liv. From all which prices of this district of heath it appears, that the cultivated and improved lands, or those naturally rich and good, have been here in contemplation. But certainly not one-tenth of this line of country is in that state; for the general and predominant features of the whole are wastes, of which in another chapter.—Average,—Rent, 16s. 3d. Price, 19l. 18s. 4d.

It is to be noted in calculating these averages, that I reject the first articles of St. Brieux to Mufilac, and the second of Campan; they are too much exceeding the common rates to be admitted, depending on merely local or extraordinary circumstances; 20l. an acre may, on a general idea, be considered as the price of the land in these districts that is improved and in regular culture; and when it is recollected that the enormous wastes are, generally speaking, of as good a soil naturally, and by very easy and practicable means capable of being made equally productive, and that they are to be hired for ever at 5d. an acre, the ignorance of the people in breaking up and improving uncultivated lands will appear amazing; it is indeed, of all the other branches of agriculture, that which is least understood in France. The few notes taken of the year's purchase, at which land sells, give twenty-five. The interest for money paid by land, 5 per cent.; and the ratio of the crop of wheat and rye to the seed, six for one; and lastly, taking the average of Doll, St. Brieux, Rospenden, and Lourd, being those places where rent and price are both minuted, it is 11. 7s. rent, and 34l. 11s. 2d. price; the gross receipt of the landlord therefore does not amount to 5 per cent.

DISTRICT OF MOUNTAIN.

The same observation is applicable in the present case; for though the provinces of Roussillon, Languedoc, Auvergne, Dauphiné, and Provence are the most mountainous in France, yet the great roads lead mostly along vales; and when they do not, but cross the highest ridges of those mountains, which is the case in the Velay and Vivarais, and somewhat so in Provence, yet when the price of land is demanded, the answer from every tongue always refers to appropriated and cultivated spots, which probably sell higher than similar ones would do in the best countries. Another circumstance, in countries where irrigation is well understood, is, that the waters of great tracks of mountains being directed over small ones of vallies, to their prodigious improvement, must of necessity add a value to them, which would grossly deceive us, if the slightest general idea was formed from it.

Roussillon.

Bellegarde to Perpignan, a measure of watered arable sells for 1200 liv. and lets for 50 liv. Their measure is to the arpent de Paris as fifteen to eleven, this

therefore is 880 liv. for that arpent (50l. 1s. 10d.), and the rent 1l. 11s. 6d. At Pia watered arable fells at 1000 liv. (32l. 1s. 3d.); good arable not watered at 600 liv. (19l. 4s. 8d.); the vale not watered 30 liv. rent (18s. 10d.).

Languedoc.

At Cauffan the festerée of arable land is sown with 96lb. of seed. Mr. Pauc-ton makes the festerée to the arpent de France, as 0,3979 is to 1,0000, or 19,158 feet; this is 192lb. per acre. At Beziers I saw a farm of 250 festerées, that was sold for 70,000 liv. or 250 liv. per festerée (21l. 17s. 6d.) At Carcaf-fonne the septier of wheat is 150lb. and they get on good land six per festerée, the festerée here being 1024 cannes of eight panns, this makes 25,000 feet; the produce therefore is 23 bushels. Extraordinary crops rise to ten septiers. This province bears a much greater character for fertility than it deserves. Monf. Astruc says of it, “Je ne pretens point parler ni du bled ni de la laine : ces deux articles font portés dans la Languedoc à peu pres au plus haut point où ils puissent aller.*” A pretty reason for the natural historian of a province to say no more about them! At Narbonne there is good wool, but the culture of corn there has little merit. Another writer is near the truth when he says, “If we except what we call the Plain of Languedoc, the lower grounds, and the low Cevenois, the rest, which makes half the province, is, of all the countries I know, the most ungrateful and the least fertile†.”

Auvergne.

At Briude and its vicinity, the septeerée of mountain land contains 1800 toises, and fells at 50 to 80 liv.; there are 64,800 feet in it, or two arpents of Paris (1l. 13s. 3d.); of middling land cultivated, the septier contains 1600 toises, and the price is 1000 liv. (29l. 3s. 7d.); the best land measures 1400 toises, and fells at 2000 liv. (66l. 14s. 4d.) What a perplexity to have a different measure, according to the quality of the soil! At a distance from the town, good land fells for 500 liv. (16l. 13s. 7d.); and middling 200 liv. (5l. 16s. 8d.) At Fix the septeerée contains 1800 toises, and the price of good land is 800 liv. but one with another, not more than 400 liv. (10l. 7s. 9d.) Rent 10 liv. and produce 30 liv. consequently pays only 2½ per cent.; but it is to be recollected, that few will hire land on such elevated spots; it is generally in the hands of the proprietors. From hence reach Pradelles, where the measures changes again; four cartonats make a journal, and sell at 300 liv. but bad land down to 30 liv.; some near towns rises to 1000 liv. A man mows, and a pair of oxen ploughs a journal.

* *Mem. pour l'Hist. Nat. de la Prov. de la Languedoc.* 4 to. 1737. Pref.

† *Hist. Nat. de la Prov. de la Languedoc.* Par M. Genfane. 8vo. iv. tom. 1777. Tom. iv. p. 193.

a day. At Villeneuve de Berg wheat yields four for one of the seed, in good years. The measure sells for 400 liv.

Dauphiné.

At Montilimart, the measure is the septerée, which they sow with a septier of wheat of 103lb. supposing them to sow, as usual in the south of France, their crop, which is eight for one, amounts to ($23\frac{1}{2}$ bushels.) Good arable in the vale, that admits watering, sells at 400 liv. (27l. 19s. 1d.) Not watered 200 liv. (13l. 19s. 6d.); the worst 150 liv. (10l. 9s. 7d.) Rent of good land in the vale, when let, 24 liv. (1l. 13s. 3d.); of the middling 18 liv. and of the bad 10 liv.—Estates pay 4 per cent.

Provence.

At Avignon, we meet with the same difficulty in discovering the measure of land accurately as at Montilimart. I must therefore take the seed for my guide here also. The salma of wheat weighs 400lb, but the pound is not the poid de marc; it is to that weight as 0,8375 is to 1,0000, or 477lb. Their measure of land is the salma also; but it is not to be ascertained by the supposition of seed. Arable land, near the city, sells at 1200 to 3000 liv. Wheat yields eight, ten, and twelve for one of the seed. Meadows are measured by the *eymena*, which space yields a ton of hay. At Lille arable sells at 400 liv. the *eymena*, if planted with mulberries; if without them 200 liv. and down to 120 liv. Pass from hence, by the Crau to Aix, where they measure by the carterée of 600 cannes,—the canne eight panns; the pann nine inches and three lines, or 21,600 feet. Arable 600 liv. the carterée (47l. 5s.) Land pays 4 per cent. At Tour d'Aigues, their measure is the soma of 1400 cannes, or 50,400 feet. Arable sells at 200 to 500 liv. average 400 liv. (13l. 6s. 10d.) Of wheat, they sow eight pannaux of 32lb. 256lb. on good land; but the pound here is the poid de table; these make, therefore, only 220lb. poid de marc. (167lb.) On bad land, however, they sow but one-fourth of this quantity, which is a most extraordinary circumstance. A good product is eight for one; a bad one four for one; and the medium of the district five (14 bushels), which is a sad proof of miserable husbandry. If, however, the wheat is put in with their hough instead of the plough, in which way the ground is stirred deeper and better, they get seven or eight for one (20 bushels). The best purchases do not pay more than 4 per cent. At Marseilles, the celebrated Abbé Raynal assured me, that he had been informed by many agriculturists, who well know France, that the whole kingdom does not produce more than $4\frac{1}{2}$ for one of the seed, on an average. And on my return from Italy, passing near Lyons, I was informed, that that province does not yield more than four for one; and also, that the common price of arable land is half that of meadow. And as at this place I am in the neighbourhood of the sub-province of Bresse,

which is a part of the generality of Dijon, I shall add here, from the information of the very ingenious *Monf. Varenne de Fenille*, that throughout that province, the measure of land is the *coupée* of 6250 feet, which is sown with a *coupée* of wheat of 22lb. the average value of which, for many years, is 2 liv. but on an average of the last ten years, at 45*l.*—the common product is five for one (12½ bushels); but maize yields at least twelve for one. Before I take leave of this district of mountain, I should observe, that by far the greater part of all these provinces bears no rent at all, and yields no other produce than what results from pasturing cattle in the mountains during the summer season, the amount of which is very trifling*. Perhaps seven-eighths of Languedoc are mountainous; half of Provence or more; three-fourths of Auvergne; and two-thirds of Dauphiné. These immense districts of mountain, abound, it is true, with lovely vallies, but their breadth is usually inconsiderable; nor do the cultivated slopes bear any proportion to the parts absolutely waste. These vast tracks unclosed, unappropriated, and generally common to the respective communities, have no other fixed price than what they sometimes are sold for to individuals, which is noted under the head of waste lands. The value is too small to be an object of this inquiry. The seigneurs, who possess the same rights, sell and fief them at a still cheaper rate. The vicinity of such great tracks of mountains is a cause for vale lands selling at a much higher price than they otherwise would. In France, hay and straw are almost the only articles of the winter food of cattle and sheep. This miserable œconomy gives a value to meadow-ground, which in a better system would probably sink full half: and for the same reason arable lands are greatly raised in their price. The more cattle the possessors can keep on the mountains in summer, so much the more valuable are all cultivated lands.—Average,—Rent, 17*s.* 7*d.* Price, 21*l.* 7*s.* 7*d.*

The average thus stated is that of land improved and cultivated, and chiefly vales, in this mountainous district. I may add also, that the rate per cent. paid by purchases varies from two one-half to four, which are the extremes; the mean may be stated at three one-half, and perhaps three three-fourths. The product of wheat and rye, proportioned to the seed, rises from four for one, to ten for one, but the latter is in watered vales; such advantages excepted, about four or five for one. Lastly, let me observe, that on selecting Roussillon, Languedoc, and Dauphiné, articles which have both rent and price minuted, I find the average of them to be, rent 1*l.* 3*d.* price 22*l.* 4*d.*

* The best mountains in this respect, that I heard of, are those that begin at Colmars, and at Barcelonetta, which are covered with a good turf, and in summer feed an immense number of cattle and sheep.

DISTRICT OF STONY SOILS.

Lorraine.

At St. Menchoud, good arable fells for 250 to 300 liv. the journal of 21,384 feet (21l. 11s. 4d.); but some is so low as 10 liv. (15s.) To Braban the same price: but near that place, whole farms through, the land of all sorts included, 80 liv. (6l. 6s.) At Verdun good arable 300 to 500 liv. (31l. 10s.); but upon the hills some so low as 10 to 20 liv. (1l. 2s. 9d.) At Mar-le-Tours arable 400 liv. (31l. 10s.); and in the way to Metz, where the measure changes to 22,575 feet, by one account, and to 480 perch, at eight feet two inches, by another; the latter is 31,680 feet, and they measure wheat by the franchar of 42lb. The uncertainty of the measure makes a good deal of intelligence which I received useless. At Metz, where the measure is 22,575 feet, on the best land wheat yields $5\frac{1}{2}$ for one, viz. one quartier of seed, at 5 liv. 15s. yields $5\frac{1}{2}$ quartiers, or 31 liv. 12s.; some so low as $3\frac{1}{2}$ for one. Arable fells at 150 liv. (11l. 4s.) Estates produce neat $3\frac{1}{2}$ to 4 per cent. and sell for 24 years purchase. At Pont à Mousson another measure 300 verge of 10 feet, the foot 10 inches, or 16,200 feet. I shall enter the intelligence as I received it, but some of the rates appear extraordinary; I am not, however, allowed to doubt, as my authority was the best the country could afford. Bad arable land in the plain fells at 300 liv. this is (reducing both measure and money, for here 31 liv. make but 24 liv. in France) 24l. 13s.; of a middling quality it fells at 500 liv. (40l. 12s. 1d.); some at 1000 liv. (79l. 12s. 2d.) The best wheat produces seven quartiers, at 130lb. but this is uncommon; the general produce is four such quartiers (23 bushels). One person here informed me, that the best produce is ten quartiers, the middling seven, and the worst three; but as this would make the average 40 bushels, I reject the intelligence, and adhere to what I have noted above. I have been recommended to at least a dozen persons in France connected nearly with agriculture, who did not know and could not discover the measure of the place where they lived, if, unfortunately, the arpenteur was absent, or non-resident in the town. Rents in the plain from 30 to 50 liv. (3l. 3s. 10d.). Estates pay 3 to $3\frac{1}{2}$ per cent. At Nancy the arpent contains 19,360 feet, or 250 toises of 10 perch. Arable land fells at 500 liv. (33l. 17s. 6d.); some at 700 liv.; the worst at 250 liv. (16l. 8s. 9d.) Estates subject to feudal honorific rights pay 3 to $3\frac{1}{2}$ per cent.; others not subject five. At Luneville finding also some difficulty in ascertaining the measure of land, I stepped a piece that was exactly a journal, and found it to contain 1974 yards, or 15,620 French feet. Arable land near good villages fells at 300 liv. (24l. 17s. 10d.) but more commonly at 124 liv. (10l. 7s. 3d.) A good produce of wheat is three razeau of 180lb. this the

the pound being to the poid de marc as 0,9309 is to 1,0000, equals 23 bushels; a middling two razeau ($15\frac{1}{2}$ bushels); the worst $1\frac{1}{2}$ ($11\frac{1}{2}$ bushels.) To Haming arable fells at 100 to 200 liv. the journal (12l. 8s. 11d.), and lets at 10 liv. (8s. 9d.)

Alsace.

To Befort the best land 600 liv. but in general arable 250 liv. the journal of 800 toises (14l. 11s. 4d.) They sow this measure with four quarters of wheat, each 42lb. (224lb.) produce thirteen to sixteen quarters ($14\frac{1}{2}$ are 2 bush.) The common price of the sack is 16 liv. or for 4, 64 liv. Barley half the value, 32 liv.—total produce, in three years, as the course is,—1, fallow,—2, wheat, 3, spring corn, 96 liv.—Rent of such land 11 liv. (12s. 3d.). At Isle, the journal contains four quarters, each ninety perch, at nine feet, or 29,160 feet. Land, in general, fells from 240 to 400 liv. (18l. 5s. 9d.) The produce of wheat, twelve to twenty quarters, at 40 lb. ($15\frac{1}{2}$ bushels.)

Franche Comté.

The journal of Besançon is 360 perch, at $9\frac{1}{2}$ feet, or 33,507 feet. Very bad arable land is to be had for 50 liv. (2l. 11s. 10d.); but some rises to 1500 liv. (77l. 15s.) and these prices are the extremes; in common, 500 liv. (25l. 18s. 4d.) The produce of wheat is two to five measures of 40lb. (from 36 to 50lb.) on an *œuvre*, the eight of a journal.—at three, this is 20 bushels. Estates pay scarcely 4 per cent.; and in the mountains, on the frontiers of Switzerland, only $2\frac{1}{2}$. To Orechamps, in the flat rich vale, a journal fells at 700 liv. (36l. 5s. 8d.) All I saw of Franche Comté, is under a wretched culture; fallows very general, yet the corn poor; and where there are exceptions, which do not often occur, still the management is without merit. The culture of maiz is a good feature, but it is neither flourishing nor clean, and much mixed with hemp.

Burgundy.

About Longeau, the measure is the journal of 360 perch, of nine feet, or 28,800 feet. The common price of land 600 liv. (34l. 19s. 2d.) The measure of wheat holds 32lb. and a journal yields to 50 (41 bushels); but this is an extraordinary crop,—thirty are more common (24 bushels); maiz yields forty measures (32 bushels), besides ten to twenty-five measure of harricots: barley thirty-five measure. In the neighbourhood of Dijon, where the journal is the same as the arpent de Paris, arable fells for 200 liv. (10l. 7s. 9d.) to 600 liv. (31l. 3s. 3d.) And the half produce of wheat, which the landlord receives from the *metayer*, five measures of 45lb. (5 bushels). The land yields, however, much more than 10 bushels, for there are deductions for certain expences of culture before he takes his half, as tythe, harvest, and threshing. At Nuy the journal

journal of arable sells at 300 to 400 liv. (18l. 3s. 6d.) It has been impossible to avoid, in this district, general errors flowing from the intelligence received, being much more in reference to good land, and such as has been long cultivated and improved, than an average of the whole. In the chapter of universal produce, which includes every species of land, this district does not class high; it is, on the contrary, among the worst cultivated in the kingdom, after the district of heath, Sologne, the Bourbonnois, and Nivernois, I know none worse: much is waste, and more under culture is neglected, yet land in the rich flat vales, through which the rivers lead, is fertile enough to command great prices, and to yield large products, even with bad management. Immense tracks in Lorraine are plagued with common rights, which are more general than in most of the other provinces. Where these are found, husbandry cannot flourish. The good Duke of Lorraine, the wisest and most benevolent sovereign of his age, seems to have done nothing in this respect, and without it the province will continue what it is, one of the poorest in France. It is a bad sign, when you find the pay of troops reckoned a great blessing. If you believe the people of these provinces, Lorraine, without her garrisons, and Franche Comté without her forges, would both be desolate; a sure mark, that agriculture is ill understood, and overstocked with useless hands, or rather mouths.——Average,——Price, 21l. 10s. 2d.—Product, 18 bushels.

I calculating this average, I reject merely local advantages of the vicinity of Befançon. I should add here, as before, that land, in this district, sells at twenty-four years purchase, and yields from $2\frac{1}{2}$ to 5 per cent.;—average $3\frac{1}{4}$. The average of the minutes, where both rent and price are noted,—rent, 11.8s. 3d.; price, 35l. 10s. 9d.

DISTRICT OF CHALK.

Sologne.

Sologne has not a chalk soil; but I saw in several places a very good clay marl, and as the province is nearly surrounded by a calcareous one, I think I am justified in my arrangement of it, notwithstanding Mons. d'Autroche says it has no calcareous stones*. In passing from Orleans to La Ferté Lowendahl, this most wretched of the French provinces is entered. Poverty and misery pervade the whole; agriculture is at its lowest ebb, and yet every where it is capable of being made rich and flourishing. Between these towns are twelve miles of a poor flat sandy gravel; for the first mile from Orleans improved; but all the rest in a miserable state; many neglected lands covered with heath. It yields nothing but rye, the crops are wretched, that being sown is a satire upon

* Page 24.

the kingdom. Rent of an arpent of France, 4 liv. (3s.); but waste for sheep-walk given into the bargain, which is of a much greater extent. Near La Ferté $4\frac{1}{2}$ liv. all here gained through the medium of *metayers*. To La Motte Beuvron 400 liv. for 150 mines of land, three mines making two arpents; this is not quite 4 liv. but much rough ground for cattle and sheep thrown in.—Miserable rye and buck-wheat, the only crops: the farmers think the former promising this year, which I am clear will not produce two quarters the acre. To Nonan-le-Fuzelier, the same country and husbandry, and the rye this year no more than one-half to one quarter per acre. To La Loge, nearly the same, and not one-tenth of it cultivated. They sow here a vernal rye, which is a true spring corn, that will not succeed if sown in autumn. It is committed to the ground in March or April, yet the crop is out only one week later than the common rye; the produce not quite so large. Buck-wheat yields 8 to 12 septiers per septerée—the septier holds 120lb. rye; this is ten bushels upon the land that is sown with two. Rye yields three to one of the seed. At Salbris, newly broken up land yields 12 boisseau of rye, of 13lb. per measure of land, of which there are 12 in a septerée, or 12 septiers of 156lb.; and advancing, rye produces three septiers the septerée; it is nearly an acre—the crop is therefore about one quarter per acre. Upon Sologne, in general, I should observe, that a gentleman of the province has calculated it to contain 250 leagues square, or a million of arpents*;—and that the net rent of it, without the landlord furnishing the cattle, is only 20*£*. to 25*£*. per arpent one with another. Another writer says, the worst lands in the province, sell at 110 liv. per arpent † de Paris (5*l*. 14*s*. 3*d*.); he means cultivated I presume (for certainly the wastes bring no such price). I can believe this from the view I took of it; and surely nothing can be a more severe satire on the agriculture of a country!—Government and the gentry are equally to blame. I have seldom seen a country so easily capable of improvement, for the soil is sand or gravel, and under it is every where found clay, or clay marl.

Saintonge.

In returning northwards, re-enter the chalk district in this province. At La Grawle the measure is thirty-two carreaux, each eighteen feet square, or 10,368 feet; sells at 10 liv. (1*l*. 12*s*. 4*d*.) being very bad, but better soils at 30 liv. (4*l*. 17*s*.) At Rignac the soil being strong and good, the Paris arpent, which is the common Saintonge measure, sells for 600 liv. (31*l*. 3*s*. 10*d*.) Wheat produces ten sacks of 150lb. (32 bushels) but this is an extraordinary crop, seven and a half much more common (24 bushels). At Barbesieux they sow wheat two years in succession; the first crop twelve to fifteen boisseau per journal; the second eight or nine: a sufficient proof of their barbarism.

* *Memoire sur l'amélioration de la Sologne*, par M. d'Autroche. 8vo. 1787. p. 4.

† *Credit National*, p. 114.

Angoumois.

The journal is to that of France, as 0,674 is to 1,000, which is something more than the arpent de Paris. At Petignac good land sells at 400 liv. (20l. 16s. 9d.) but had, by which they mean chalk soils, yields little or nothing, if others are bought with them. At Roulet the arpent is one and a half journal of 200 carreaux, each twelve feet, or 28,800 feet. Maiz here produces thirty to forty boiseau, which contains 45lb. of wheat (38 bushels). Wheat twenty-five boiseau the first crop (26 bushels), but the second not above sixteen (17 bushels); and all these crops are on the best lands only; inferior ones produce much less. At Angoulême wheat yields twelve boiseau the journal, the boiseau 78 to 92lb. Strong land sells at 200 liv. (11l. 12s. 9d.) At Verteuil the journal is 200 carreaux, each 12 feet square, which is the same as at Boulet; land sells at 300 liv. (1l. 10s.) being from 20 to 25 years purchase; rent 12 liv. (14s.) They sow more than a boiseau of wheat, of 80lb. per journal (90 is 120lb. per English acre); produce five (10 bushels). At Caudac wheat three sacks per journal, the sack two boiseau, the boiseau 70 to 80lb. (11 bushels); maiz $4\frac{1}{2}$ sacks (16 $\frac{1}{2}$ bushels). Upon Angoumois in general I may observe, that the only possible method of cultivating land well in such a province, would be by sainfoin and turnips being well understood; of the latter they have not an idea; and the former though not absolutely unknown, is yet so very weakly and sparing cultivated, that there is not one acre where there ought to be a thousand. When chalks are farmed upon the common routine of management that pervades all France, no wonder we hear of such miserable crops. The province does not, on an average, produce one-fourth of what similar land in England yields.

Poitou.

At Ruffec they take their crops of wheat in succession; produce of the first, 12 to 16 boiseau of 80lb.; of the second, six to nine; and of the third three. At Coute Verac 12 boiseau per journal, on land that sells at 100 liv. For many miles to Poitiers, the country all appears as badly cultivated as it is *sombre* to the eye, being one of the most dreary I have seen in France. The products run very low, if I may judge by the state of the stubbles, and from the scattered hints, rather than information, I received, it does not yield the half of what a little better husbandry would enable it to do. At Clain the measure is the boise-lée of 16 chains square, each chain 10 feet, or 25,600 feet, which space yields 12 to 18 boiseau of 32lb. of rye (13 bushels). The same measure of land sells at La Tricherie at 60 to 90 liv. (4l. 18s.); at Chateaurault for 60 liv. (3l. 18s. 9d.) Rye produces 10 boiseau (8 bushels). Advancing, the soil improves a little; it sells at 100 liv. (6l. 11s. 2d.) and produces 12 to 14 boiseau of rye.

Y y Touraine

Touraine.

At Beauvais loamy land sells at 100 liv. the arpent, but chalky soils at only half that sum. Wheat after sainfoin yields 80 boisseau, but after fallow only 20, I am so much in doubt what the arpent is, and what the boisseau, that I give no reduction; they told us the former was 100 chain of 12 feet. At Montbazou the arpent of 100 chain, each 25 feet square, or 62,500 feet, sells at 3 to 8 liv. the chain, or 300 to 800 liv. the arpent (14l. 16s. 7d.) Wheat yields 50 gerbs, each $1\frac{1}{2}$ boisseau (16 bushels) barley now cutting, and not two quarters per English acre. At Tours large purchases pay 5 per cent. but small ones $3\frac{1}{2}$. Amboise, an arpent of land 200 liv. To Blois the best land 300 liv. (15l. 12s. 4d.) There are 12 boiselee in the arpent, sown with a boisseau of seed of 10lb. (157lb.).

Sologne.

Re-enter this province, where it has no such miserable countenance as in the part we passed before. To Chambord the arpent 1600 toises, the rent of which is 24 liv. (14s.) but this is the best land only; the general produce being, vines excepted, very low. To Orleans pass some buck-wheat, that will not yield more than five or six bushels an acre; rent of sands 8 liv. (4s. 2d.).

Champagne.

To Chateau Thiery the vale arable lets at 12 liv. the arpent (8s. 2d.); but the hills are poor, and yield much less. All the products I see are miserably poor, yet the soil is a good loam. Near Mareuil farms are let at the third franc, paying the landlord by that division 20 to 24 liv. the arpent (16s.) Land sells at thirty years purchase, and pays 5 per cent. At Epernay estates in general pay 3 per cent. The chalky marl of the vale, for four miles before Rheims, has not much wheat, but a great deal of rye, which is by far the cleanest corn I have seen this year in France, unless the poor have weeded the stubble for their cows. Price 200 to 250 liv. the arpent of France (7l. 16s. 7d.) In the country between La Loge and Chalons there is much that has been sold at 30 liv. the arpent (1l. 1s.) and some even at 6 liv. (4s. 2d.); and many tracks let at 20s. (8d.); and much is left waste to weeds, not being deemed worth sowing, that would yield sainfoin worth three guineas an acre. To Ove, the miserably poor chalky soils sell at 48 liv. the journal (1l. 13s. 3d.) and some at 27 liv. (18s. 4d.); nor can any thing be more wretched than the products. With regard to the whole province I should note here, that the provincial assembly, in their return of the whole, stated, that Champagne contained four millions of arpents, the rental of which was 20,000,000 liv. and the gross product 60,000,000 liv; this makes the produce 15 liv. (10s.)—and the rent 5 liv. (3s. 6d.); which valuations

tions clearly shew, that great wastes are supposed to yield little or nothing ; for the product of vines, and the lands on the rivers, is considerable. Land sells in Champagne as it sells elsewhere, according to the interest expected to be made by it ; the price, therefore, follows the culture ; the rent, where *metayers* are the tenants, depends absolutely upon the produce ; while agriculture, therefore (vineyards excepted), is at such a low and miserable pitch, the landlord can reasonably expect nothing more than the pittance he receives at present. But the improvements to be made in this country are immense, by means of artificial grasses, turnips, and sheep. But the stupid ignorance of the landlords, and the pernicious prejudices they inherit for the army, in common with other Frenchmen, remove all pity of their condition ; they receive the full measure of their merit ; but the poverty of the peasantry truly deserves compassion. Upon the whole, the poor chalk provinces must be considered as the worst cultivated in France ; and no wonder ; the proper management of this soil depends absolutely on three things, turnips, grasses and sheep, neither of which is known here any more than among the Hurons. This circumstance is decisive.

Average,—Rent, 6s. 9d. Price, 9l. 1s. 5d. Product, 13½ bushels.

Land in these districts sells, at an average, at 25 years purchase ; yields 4 per cent. interest on the capital invested ; and the produce of wheat and rye is four for one of the seed. There are but two minutes that contain, in the same article, both rent and price. The average is 10s. 4d. rent, and 12l. 13s. 3d. price : it pays, therefore, about 4 per cent. by this account ; and it should be observed, that the rent is not a net produce—for the landlord has his vingtièmes to pay out of it.

DISTRICT OF GRAVEL.

Burgundy.

At Autun is the separation between the various stony soils of the rest of this province, the lands of which are high, and the plain gravelly through which the Loire runs. The measure is the *boiselée*, the space which a *boiseau* of rye sows that contains 40lb. ; at 160lb. per English acre, the *boiselée* would be about 9600 French feet. As to rent, nothing can be discovered accurately, without details, which few landlords would know how to give ; for grass, waste, and wood are thrown into the bargain to the farmer, and he divides rye and cattle with the landlord ; as to price, the only information I could get from a person who I should have thought qualified to answer many queries was, that an estate which yields 500 *boiseau* of rye, with grass, waste, and wood proportioned to the practice of the country in general, would sell for 30,000 liv. At Luz y rye, in a good year, yields five or six for one of the seed. The whole country

from Autun to Bourbon Lancy is a granite, or gravel soil, and no produce to be seen but very miserable rye.

Bourbonnois.

At Chavanne they sow a boiseau of rye of 20lb. on a boiselée of land, the produce in a good year five or six for one. An estate to be sold here, consisting of three farms, which yield, by *metaying*, 3000 liv. a year, and the price asked 80,000 liv. but to be had for 60,000 liv. consequently pays 5 per cent. At Moulins the arpent contains eight boiselées, each of 168 toises square, or 48,384 feet, and in the boiselée 6048 feet. Good arable sells at 150 to 200 liv. the arpent (51. 19s. 10d.), but there is much so bad as to be had for 12 liv. the arpent (7s. 10d.) All purchases pay 5 per cent. They sow 160lb. of rye per arpent (140lb.), and get four or five times the seed. In the neighbourhood an estate of 10,000 liv. a year to be sold, the price asked 300,000 liv. but timber, &c. &c. given in reduce it to 250,000 liv.; it would pay 4 per cent. neat for the money, by the miserable produce of $3\frac{1}{2}$ or 4 liv. (2s. 6d.) per arpent for the landlord's half, to gain which he is obliged, like all his neighbours, to provide the whole live stock of the farms; take the price at 250,000 liv. (10,937l.) and the annual rent at 10,000 liv. (437l.) at 2s. 6d. per English acre, and there will be 3496 acres, at the price of 3l. 2s. 6d. per acre. This estate yields annually 5381 boiseau of rye, at 20lb. (at 55lb. English the bushel, this is 2150 bushels, and at 3s. the bushel is 322l. 10s.); the produce is five for one of the seed. At La Palisse rye produces four for one. The gravelly plain continues to Neufmoutier.

Nivernois.

All I saw of this province resembles the Bourbonnois in soil, culture, and produce; rye here, as there, is almost the only crop; but there are more variations, for oats are sometimes taken after the rye, and there are districts that produce some wheat. The gravelly plain of the Loire, which includes these two provinces, commences to the S. at Roanne, in the Lyonnois. I shall in general observe upon this gravelly district, that it is one of the most improveable I have any where seen; much might be done in it, by a husbandry well adapted to sheep, for which species of stock both the provinces are admirably calculated; and I should add, that it is hardly possible to conceive any thing more despicable than the breed of that animal which is found here; rye-straw, the winter provision, instead of turnips, is sufficient to explain it. Nothing can hardly be poorer than the *metayers* of the Bourbonnois; and the landlords feel the effects of their poverty in a manner that one would think sufficient to open their eyes to their real situation. They receive about 2s. 6d. an acre, on an average, not for the rent of the land only, but also for running the hazard of all the live stock, which

which they provide for the estate; thus they have the principal part of the stock and hazard of farming, without any of the profit of it; for the ignorance of the *metayers* is such, that it is in vain to expect any improvement from them. If in such a situation gentlemen will not take their lands into their own hands, at least enough to prove that the country might yield far other crops, they must be as torpid as their *metayers*, and receive from their poverty the just reward of prejudice and indolence.—Average,—Price, 3l. 3s. 4d.

I should suppose the rental, on an average of the whole district, might, from the *metayers*, be about (2s. 6d.) an acre, from which, however, should be deducted the interest of the sums invested in stocking the farm with cattle, sheep, horses, and hogs, which is a considerable deduction. On the other hand, timber, underwood, some meadows, always kept in hand—vines, ponds, of which there are many; the rent of mills, &c. more than balance that deduction, and may probably raise the total receipt to (3s.) an acre, or something more. Estates, in those provinces, pay about $4\frac{1}{2}$ per cent.; and the produce of rye may be calculated at five for one.

DISTRICT OF VARIOUS LOAMS.

Berry.

In passing from the *trifte* Sologne into this province, the soil improves, and with it the products, but continue, however, very moderate, and far inferior to what they ought to be. A few leagues before Verson, where the Count d'Artois's forest ends, rye and buck-wheat yield $5\frac{1}{2}$ to six septiers on the festerée of land, but barley less; this is five or six for one. A farmer occupies fifty festerées of land for 150 liv. rent. The boisseau of rye is 15lb. and twelve make a septier of 180lb. which quantity of seed makes the festerée to be more than an acre; five roods at least. Wheat and barley yield five or six septiers. Advancing toward Vatan, the soil improves much; the product of wheat $3\frac{1}{2}$ septiers of 204lb. the boisseau being 17lb.; and they sow a septier of all sorts of corn per festerée, on all sorts of land. On good land, the *metayers* pay half the produce; but on middling, the rent is a septier per festerée. This makes the rent equal only to the seed, and the landlord consequently gets nothing for the fallow year. They very amply merit such rents. Wheat, on the best land, yields five or six for one. At Vatan, I conversed with a farmer, who, for thirty festerées of arable, and six of meadow, pays 600 liv. and eighteen septiers of corn, each twelve boisseau, that now sells at 25/. He has two oxen, six horses, eight cows, and 700 sheep. His whole rent, therefore, is about 37l. which, for such a stock, appears ridiculous: but it seems to be a feudal rent

to the seigneur, the property of the land being in the man. He spoke of his whole farm being thirty-six festerées, paying no regard to woods and wastes that support his live stock. At Argenton, wheat produces five or six boiseau of 25lb. per boiselée, eight of which make a festerée; oats and barley three boiseau. Advancing, find that they sow a boiseau of wheat, of 25lb. per boiselée of land. Upon the whole of this intelligence concerning Berry, I must observe, from the portions of seed, 180lb. 204lb. 200lb. we may, in a rough way, estimate that the arpent, journal, or festerée, nearly equals the arpent of France, and that the respective products which amount to 1122lb. 1080lb. and 1096lb. amount, on an average, to about two quarters per acre. M. du Pré de St. Maur says, that ordinary land, *terres mediocres*, let in Berry at 15*s*. the arpent*. But all rents are risen since his time.

La Marche.

Near Boismandé, much sandy land, that produces rye only, and the crops exceedingly poor; I saw much that will not yield more than a quarter per acre, yet the sand is good, but it is all fallowed. Produce eight boiseau, of 25lb. per boiselée. At La Ville au Brun good sand yields five boiseau per boiselée, but on a general average not more than three. The septier is eight boiseau, and the festerée, or arpent, eight boiselée. From these proportions it should seem, that Berry measure continues here.

Limosin.

In this province the festerée is 625 toises, or 21,500 feet; it is sown with four quarters of 28lb. or 112lb. (218lb.) Rye produces four times the seed, but no trifling quantity is sown, that hardly yields more than the seed, by reason of poverty and bad management. At Limoge I was informed, that the whole province, on an average, does not yield more than six for one of the seed of all sorts of grain; this cannot be more than $4\frac{1}{2}$ of wheat†. The price of land is much increased; sells now at 33 years purchase, and yields 3 per cent.; common price 100 liv. (7*l*. 8*s*. 9*d*.) From Limoge to St. George the country is much better than La Marche; there is some wheat every where, and the crops are rather superior. Arable 100 liv. the festerée, and at Douzenac 100 to 150 liv. (9*l*. 5*s*. 11*d*.).

In this district the price of land, on an average, is 7*l*. 8*s*. 9*d*. per acre. The produce is 14 bushels; the return for seed is five for one; and the interest paid by purchases may be estimated at 4 per cent.

* *Essai sur les Monnoyes.*

† In the Cahier of the nobility of Limoge it is asserted, that the soil is the most ungrateful in the kingdom, and gives at most but three net for one, but this is an exaggeration.—P. 4.

GENERAL RECAPITULATION.

Price.

North Eastern District, £.29 13 3	Alface, - - - £.50 0 0
The Garonne, - - - 51 10 0	Limagne, - - - 60 0 0

It would fill too much of these papers if I were to insert the reasons for supposing the average of these, proportioned to the extent of each, to be 33l. per acre, at which I calculate it.

District of Heath, - £.19 18 4	District of Chalk, £.9 1 5
Mountain, - - - 21 7 7	Gravel, - - - 3 3 4
Stone, - - - 21 10 2	Various, - - - 7 8 9

Average of the whole, proportioned to the extent of each, rejecting fractions, 20l.

Rent.

North Eastern District, £.1 3 10	Chalk, - - - £.0 6 9
Heath, - - - 0 16 3	Gravel, - - - 0 3 0
Mountain, - - - 0 17 7	

This table is too incomplete to draw any average from it: the most satisfactory way of ascertaining the rent, that is proportioned to the price minuted, is to have recourse to those notes that contain, at the same places, both rent and price; these are, on a medium,

Rent.			Price.			Rent.			Price.		
l.	s.	d.	l.	s.	d.	l.	s.	d.	l.	s.	d.
Loam, N. E. District,	1	1	5	31	5	0	Stone, - - -	1	8	3	35 10 9
Heath, - - -	1	7	0	34	11	2	Chalk, - - -	0	10	4	12 13 3
Mountain, - - -	1	0	3	22	0	4	Gravel, - - -	0	2	6	3 2 6

Average,—Rent, 18s. 3d. Price, 23l. 3s. 10d. This is 3l. 18s. per cent.

And from hence we may venture to assign the rent fairly proportioned to the above general average price of 20l. per acre, viz. 15s. 7d. Mons. Papillon de la Tapy calculates that, on an average, lands that sell for 520 liv. per arpent, yield a *product* of 7 liv. 11s.* by which I suppose he means rent, this is 1½ per cent. ; I quote it only to shew what mere calculations are worth, that are founded on suppositions.

* *Tableau Territorial de la France.* Folio. 1789. P. 9.

Produce.

Loam, N. E.	-	23½ bushels.	Mountain,	-	-	18 bushels.
— Garonne,	-	37	Stony,	-	-	18
— Alface,	-	26	Chalk,	-	-	13½
Average of Loam*,	-	25	Gravel,	-	-	12
Heath,	-	19	Various,	-	-	14

Average of the whole, proportioned to the extent of each, 18 bushels.

Quantity of Seed Sown.

		lb.			lb.
Flanders,	Orchies,	153	Anjou,	Angers,	172
Normandy,	Falaife,	110	Languedoc,	Causſan,	192
Guienne,	Landron,	160	Provence,	Tour d'Aigues,	167
	Cubſac,	169	Angoumois,	Verteuil,	120
Alface,	Straſbourg,	100	Orleanois,	Blois,	157
	Befort,	224	Bourbonnois,	Moulins,	140
Auvergne,	Izoire,	173	Limofin,	Limoge,	218
Bretagne,	Rennes,	166			

Average, 161 lb. per English acre.

Return for Seed.

District of Loam,	-	8 for 1.	District of Stone,	-	4 for 1.
Heath,	-	6	Gravel,	-	5
Mountain,	-	5	Various,	-	5

The average may probably be ſtated at fix for one. It is hardly to be conceived by what miſerable management they can contrive to get ſuch a wretched produce; but as they are univerſal fallowifts, except on the richeſt ſoils, we may conſider it as an exact picture of the conſequences that flow from this abſurd practice. The French writers depreſs the products of their kingdom even below this: Monſ. Queſnay ſays it is only five for one on good lands†; and Monſ. l'Abbé Raynal four and a half on an average of all.

Interest per cent.

District of Loam, N. E.	-	3	District of Sone,	-	3½
Alface,	-	2½	Chalk,	-	4
Heath,	-	5	Gravel,	-	4½
Mountain,	-	3½	Various,	-	4

Average, 3½.

* In calculating this average, I aſſign thirty as the produce of the Garonne diſtrict, and then give it the proportion of its full extent.

† *Encyclopædia*. Tom, 1. p. 189. Folio.

And now, drawing the whole into one view, we may say,

That the average price of all the cultivated land in the kingdom is, per English acre, 20l.

That the rent of such part as is let is 15s. 7d.

That the average produce of wheat and rye is 18 bushels.

That the seed yields return 6 for 1.

That land pays per cent. $3\frac{1}{4}$.

OBSERVATIONS.

I must, in the first place, caution the reader against supposing that these proportions are applicable to the whole territory of France; vines, and wastes, and gardens, and spots of extraordinary fertility are excluded; and the price of 20l. per acre, and the rent of 15s. 7d. are those of the cultivated lands commonly found throughout the kingdom. No waste, no sheep-walk, nor any tracks neglected, and not in profitable produce, are included. But whenever rent is mentioned, we must recollect, that much the greater part of the lands of France are not let at a money-rent, but at one-half or one-third produce, and that in those places, in the central and southern provinces, and in several of the northern ones, where rent occurs in the notes, it is probable that for one acre so let, there are twenty at half produce. This will serve in a good measure to explain the height of the rent here minuted, on comparison with the husbandry.—Such management in England would not afford any such rent; but as the landlord in France is obliged to stock his farms at his own expence, the greatness of this rent is more apparent than real; for it must not only pay him for the use of his land, but also for that of the capital, which he is obliged, through the poverty of the farmers, to invest upon it. Another circumstance, which raises rent beyond all comparison with it in England, is the freedom from poor rates; to which may be added, the very moderate demands made for tythes. By combining the preceding tables, there appears some reason to believe, that the persons who, in different parts of the kingdom, gave me intelligence of the interest per cent. accruing from land, had in contemplation rather the *gross receipt*, than the *net profit*. The two accounts of rental and price give 3l. 18s. per cent. gross receipt;—if the two vingtièmes, and 4s. per livre, being the landlord's tax, are deducted, there will remain about $3\frac{1}{2}$ per cent.—from which there must be a further deduction for incidental losses; and for the interest of the capital invested in live stock; which will certainly demand some deduction. It should therefore seem, that 3, or $3\frac{1}{4}$ per cent. absolutely net, is as much as can be reckoned by this account; whereas the direct intelligence was $3\frac{1}{4}$. These little variations will for ever arise in such inquiries,

when founded, as they must be, on the intelligence received from such a variety of persons, who have different degrees of knowledge and accuracy.

In order to judge the better of these particulars, so interesting to the political arithmetician, it will be necessary to contrast them with the similar circumstances of England; by which method their merit or deficiency may be more clearly discriminated. In respect to England, may be remarked, in the first place, a very singular circumstance, which is the near approximation of the two kingdoms, in the two articles of *price* and *rent*. The rent of cultivated land in England, exclusive of sheep-walks, warrens, and wastes, if it could be known accurately, would be probably found not much to exceed 15s. 7d. per acre; at least I am inclined to think so, for several reasons, too complex to give here. I have indeed none for fixing on that *exact* sum; but I should calculate it somewhere between 15s. and 16s. Now 15s. 7d. at twenty-fix years purchase, which I take to be the present average price of land in this kingdom (1790 and 1791), is 20l. 5s. 2d. The two kingdoms are, therefore, on a foot of equality in this respect. The interest paid by land $3\frac{1}{2}$ in France, is higher than in England, where it cannot be calculated at more than three, perhaps not more than $2\frac{1}{2}$. If it be thought extraordinary, that land should sell for as high a price in France as in England, there are not wanted circumstances to explain the reason. In the first place, the net profit received from estates is greater. There are no poor rates in that kingdom; and tythes were much more moderately exacted, as it has been observed above. Repairs, which form a considerable deduction with us, are a very trifling one with them. But what operates as much, or perhaps more than these circumstances, is the number of small properties. I have touched several times on this point in the course of the notes, and its influence pervades every part of the kingdom; all the savings which are made by the lower classes in France, are invested in land; but this practice is scarcely known in England, where such savings are usually lent on bond or mortgage, or invested in the public funds. This causes a competition for land in France, which, very fortunately for the prosperity of our agriculture, does not obtain here.

As to the next article, namely, the acreable produce of corn land, the difference will be found very great indeed; for in England, the average produce of wheat and rye (nineteen-twentieths the former) is twenty-four bushels, which form a vast superiority to eighteen, the produce of France; amounting to twelve for one of the seed, instead of six for one. But the superiority is greater than is apparent in the proportion of those two numbers; for the corn of England, as far as respects *dressing*, that is cleaning from dirt, chaff, seeds of weeds, &c. is as much better than that of France, as would make the difference at least twenty-five (instead of twenty-four) to eighteen; and I am inclined to think even more.

more. There is not a plank threshing-floor in France; and no miller can grind corn as he receives it from the farmer, without further cleaning. Another point, yet more important, is, that English wheat, in much the greater part of our kingdom, succeeds other preparatory crops; whereas the wheat of France follows almost universally a dead fallow, on which is spread all the dung of the farm. A circumstance, which ought to give a considerable superiority to the French crops, is that of climate, which in France is abundantly better for this production than in England; and, what is still of greater moment, the spring corn of France, compared with that of England, is absolutely contemptible, and indeed unworthy of any idea of comparison. While, therefore, in France, the wheat and rye are relied on for the almost total support of the farm and farmer, reason tells us, that the wheat ought to be much superior to the produce of a country, in which it does not bear an equally important part. Lastly, let me observe, that the soil of France is, for the most part, better than that of England. Under these various circumstances, for the average produce of the former, to be so much inferior, is truly remarkable. But eighteen bushels of wheat and rye, and miserable spring corn, afford as high a rent in France, as twenty-four in England, with the addition of our excellent spring corn: this forms a striking contrast, and leads to the explanation of the difference. It arises very much from the poverty of the French tenantry; for the political institutions and spirit of the government having, for a long series of ages, tended strongly to depress the lower classes, and favour the higher ones, the farmers, in the greater part of France, are blended with the peasantry; and, in point of wealth, are hardly superior to the common labourers; these poor farmers are *metayers*, who find nothing towards stocking a farm but labour and implements; and being exceedingly miserable, there is rarely a sufficiency of the latter. The landlord is better able to provide live stock; but, engaged in a dissipated scene of life, probably at a distance from the farm, and being poor, like country gentlemen in many other parts of Europe, he stocks the farm not one penny beyond the most pressing necessity:—from which system a wretched produce must unavoidably result. That the tenantry should generally be poor, will not be thought strange, when the taxes laid upon them are considered; their *tailles* and capitation are heavy in themselves; and the weight being increased by being laid arbitrarily, prosperity and good management are little more than signals for a higher assessment. Under such a system, a wealthy tenantry, on arable land, can hardly arise. With these farmers, and this management, it is not much to be wondered at that the lands yield no more than eighteen bushels. Such a tenantry, contributing so little beyond the labour of their hands, are much more at the landlord's mercy than would be the case of wealthier farmers, who, possessing a capital proper for their undertakings, are

not content with a profit less than sufficient to return them a due interest for their money; and the consequence is, that the proprietor cannot have so high a rent as he has from *metayers*, who, possessing nothing, are content merely to live. Thus, in the division of the gross produce, the landlord in France gets half; but in England, in the shape of rent only, from a fourth to a tenth; commonly from a fourth to a sixth. On some lands he gets a third, but that is uncommon. Nothing can be simpler than the principles upon which this is founded. The English tenant must not only be able to support himself and his family, but must be paid for his capital also,—upon which the future produce of the farm depends, as much as on the land itself.

The importance of a country producing twenty-five bushels per acre instead of eighteen, is prodigious; but it is an idle deception to speak of twenty-five, for the superiority of English spring corn (barley and oats) is doubly greater than that of wheat and rye, and would justify me in proportioning the corn products of England, in general, compared with those of France, as twenty-eight to eighteen*; and I am well persuaded, that such a ratio would be no exaggeration. Ten millions of acres produce more corn than fifteen millions; consequently a territory of one hundred millions of acres more than equals another of one hundred and fifty millions. It is from such facts that we must seek for an explanation of the power of England, which has ventured to measure itself with that of a country so much more populous, extensive, and more favoured by nature as France really is; and it is a lesson to all governments whatever, that if they would be powerful, they must encourage the only real and permanent basis of power, AGRICULTURE. By enlarging the quantity of the products of land in a nation, all those advantages flow which have been attributed to a great population, but which ought, with much more truth, to have been assigned to a great consumption; since it is not the mere number of people, but their ease and welfare, which constitute national prosperity. The difference between the corn products of France and England is so great, that it would justify some degree of surprise, how any political writer could ever express any degree of amazement, that a territory, naturally so inconsiderable as the British isles, on comparison with France, should ever become equally powerful; yet this sentiment, founded in mere ignorance, has been very common. With such an immense superiority in the produce of corn, the more obvious surprise should have been, that the resources of England, compared with those of France, were not yet more decisive. But it is to be observed, that there are other articles of culture to which recourse must be had for an explanation: vines are an immense object in the cultivation of the latter kingdom,

* In the *Cabier de la Noblesse de Blois*, p. 26, it is asserted, that the land products of England are to those of France, arpent for arpent, as forty-eight to eighteen. But on what authority?

and yield all the advantages, and even superior ones to those afforded by the assiduous culture of corn in England. Maiz is also an article of great consequence in the French husbandry; olives, silk, and lucerne are not to be forgotten; nor should we omit mentioning the fine pastures of Normandy, and every article of culture in the rich acquisitions of Flanders, Alsace, and part of Artois, as well as on the banks of the Garonne. In all this extent, and it is not small, France possesses a husbandry equal to our own; and it is from well seconding the fertility of nature in these districts, and from a proper attention to the plants adapted to the soil, that there has arisen any equality in the resources of the two kingdoms; for, without this, France, with all the ample advantages she otherwise derives from nature, would be but a petty power on comparison with Great Britain. In order the better to understand how the great difference of product between the French and English crops may affect the agriculture of the two kingdoms, it will be proper to observe, that the farmer in England will reap as much from his course of crops, in which wheat and rye occur but seldom, as the Frenchman can from his, in which they return often.

An English Course.

1, Turnips,	
2, Barley,	
3, Clover,	
4, Wheat,	25
5, Turnips,	
6, Barley,	
7, Clover,	
8, Wheat,	25
9, Tares, or beans,	
10, Wheat,	25
11, Turnips,	
<hr/>	
	75

A French Course.

1, Fallow,	
2, Wheat,	18
3, Barley, or oats,	
4, Fallow,	
5, Wheat,	18
6, Barley, or oats,	
7, Fallow,	
8, Wheat,	18
9, Barley, or oats,	
10, Fallow,	
11, Wheat,	18
<hr/>	
	72

The Englishman, in eleven years, gets three bushels more of wheat than the Frenchman. He gets three crops of barley, tares, or beans, which produce nearly twice as many bushels per acre, as what the three French crops of spring corn produce. And he farther gets, at the same time, three crops of turnips and two of clover, the turnips worth 40s. the acre, and the clover 60s. that is 12l. for both. What an enormous superiority! More wheat; almost double of the spring corn; and above 20s. per acre per annum in turnips and clover. But farther; the Englishman's land, by means of the manure arising from the consumption of the turnips and clover is in a constant state of improvement, while the Frenchman's farm is stationary. Throw the whole into a cash-account, and it will stand thus:—

English

<i>English System.</i>				<i>French System.</i>			
	£.	s.	d.		£.	s.	d.
Wheat 75 bushels, at 5s. -	18	15	0	Wheat 72 bushels, at 5s. -	18	0	0
Spring corn three crops, at 32 bushels, 96 bushels, at 2s. 6d.	12	0	0	Spring corn three crops, at 20 bushels, 60 bushels, at 2s. 6d.	7	10	0
Clover two crops, - - -	6	0	0				
Turnips three crops, - - -	6	0	0		25	10	0
	<hr/>				<hr/>		
	42	15	0	Per acre per annum, - - -	2	6	4
	<hr/>				<hr/>		
Per acre per annum, - - -	3	17	8				

In allowing the French system to produce twenty bushels of spring corn, while I assign thirty-two only to the English, I am confident that I favour the former considerably; for I believe the English produce is the double of that of France: but stating it as above, here are the proportions of forty-two on an improving farm to twenty-five on a stationary one; that is to say, a country containing 100,000,000 acres produces as much as another, whose area contains 168,000,000, which are in the same ratio as thirty-six and twenty-five.

CHAP. V.

Of the French Courses of Crops.

THERE is no circumstance which so strongly distinguishes the knowledge of the present age, in the theory and practice of husbandry, on comparison with that of all preceding periods, as this of the right arrangement of the crops cultivated on arable land. Compared with this, all other articles are of very little importance; and were the present the proper place to expatiate on it, I should not be ill employed in explaining the amazing ignorance or negligence of the generality of writers in either totally omitting, or grossly mistaking, a subject so essential to every species of good management*. Unless this part of the farmer's conduct be well understood, the greatest exertion and improvement in other branches of his business, lose their effect; and a nation finds the cultivation of its territory, producing wealth and prosperity, almost exactly in proportion to the intelligence with which its husbandmen observe this leading prin-

* It is a singular circumstance, that till the year 1768, there did not appear a single work (as far as I can judge from my collection, which is considerable) where this subject was treated with any tolerable attention to those rules of practice, which are now so well known.

ciple of the art. As the difference between good and bad farmers depends more on this point than on any other, so the difference between well and ill cultivated countries is almost wholly resolvable into the effects derived from the rotation of crops,—a subject so important, that an ample dissertation would be necessary fully to elucidate it; for the present, I can only insert the miserable rotations commonly practised in France; and briefly explain in how great a degree the errors and deficiencies of the husbandry of that kingdom, and of every other, flow from this source. The most satisfactory method will be to arrange the courses according to the soils in which they are found.

DISTRICT OF RICH LOAM.

Through the provinces of Piccardy, Isle of France, Normandy, and part of Artois, the prevalent course is, 1, fallow; 2, wheat; 3, spring corn;—there are some variations, but not of consequence. In Flanders, and the rest of Artois, the management is exceeding good; crops are in constant succession, without a fallow being known:—the superiority of the husbandry between Valenciennes and Lille may be easily conceived, from this common course:—1, wheat,—and after it turnips the same year; 2, oats; 3, clover; 4, wheat; 5, hemp; 6, wheat; 7, flax; 8, coleseed; 9, wheat; 10, beans; 11, wheat.

Observations.

Of this great portion of the richest and most fertile part of France, it is only an inconsiderable district, viz. the conquered province of Flanders and part of Artois, that are well cultivated. Hence it should appear, that the institutions of the French government have been unfavourable to agriculture; and indeed we shall find a confirmation of this remark in Alsace, another territory very well cultivated, and also conquered. When we see some of the finest, deepest, and most fertile loams that are to be met with in the world, such as those between Bernay and Elbeuf, and parts of the Pays de Caux, in Normandy, and the neighbourhood of Meux, in the Isle of France, destined to the common barbarous course of, 1, fallow; 2, wheat; 3, spring corn; and the produce of this spring corn beneath contempt; the whole exertion and produce being seen in a crop of wheat, we must be convinced, that agriculture, in such a kingdom, is on the same footing as in the tenth century. If these lands were then tilled at all, they were, in all probability, as well tilled as at present. The country, in some parts of this N. E. district, being in open fields, and mixed properties, accounts very well for the system there pursued; but it is a very partial answer to my objection, since there are large portions much inclosed, in which the farmer might vary his rotation as he pleased; and we accordingly see Mons. Cretté, at Dugny, rejecting fallows:—I trust it is more
a want

a want of light and knowledge, than of power: and the clearest proof of this fact, is the same husbandry being pursued in accidental inclosures that are found in open districts, as in the fields, burthened with detestable common rights. However, as far as these extend, it must be confessed, that there is no power of improvement; and if the present constitution of France be entirely settled at last on mere democratical principles, no improvements, *in this respect*, can ever be looked for; because common rights usually give, to the lowest of the people, who have no property, a power of invading the properties of others; and the omnipotence of *the people* (by which term, should be understood men without property) in a pure democracy will give more efficacy to their right of injury, than to any right of preservation. Where the people have no rights over arable lands the common consent of proprietors and farmers might do much; but how is such a consent to be looked for?—We may ask ourselves this question, as we well know that nothing among us, but legislative authority, will force men to follow their own manifest interests. The general ignorance of good agriculture is not, in this respect of courses of crops, more obvious in the fields of the farmer, than in the French books of rural œconomy. I could quote some hundred writers who boast of the culture of the Pays de Beauce, and of Picardy; yet those very districts are totally void of all merit, being bound in the thralldom of regular fallows, and producing but one good crop in three years.

PLAIN OF ALSACE.

In this flat vale of rich land the fields are never fallowed; the crops substituted, and preparatory to wheat, &c. are potatoes, poppies for oil, pease, maiz, vetches, clover, beans, hemp, tobacco, and cabbages.

Observations.

The rich plain of Alsace resembles Flanders, but is inferior in soil and management, yet both are excellent. The importance of getting two crops a year is better understood in Flanders, or at least more spiritedly practised; yet we are not to suppose them deficient in Alsace; but there is not an equal number of great towns to yield equal quantity of manure. The variety of crops in culture, however, is here a considerable merit; and shews a freedom from the silly and bigotted notion of the French (if I may use the expression) so common throughout the kingdom, of considering every thing as inferior to wheat; and of looking upon those rotations only as deserving of notice, in which it quickly recurs. It is remarkable that the good principles of management, in respect to courses of crops in Alsace, have not the power to banish, or even lessen, fallows an inch beyond the capital soils. It does not extend beyond Saveren one way, nor beyond Isenheim another; the soil declining, the management

ment declines ; and you immediately find barren fallows on sand that would give the finest crops of turnips. The same remark is applicable to the rich district of the N. E. The methods of Flanders and Artois have no effect beyond the deep fertile soils ; nor the principles of those methods, which are to the full as applicable to poor land as to that which is rich. They would demand turnips for the preparation on poor land, as much as beans or cabbages on the richer soils ; but though such principles are vigorously carried into execution on the latter, they are absolutely unknown in the neighbourhood on the former. In this circumstance, as I shall shew more at large in another chapter, consists the material difference between English and French agriculture. The barren sands of Norfolk and Suffolk, and the poor flints of Buckinghamshire, and the chalks of Hertford, are as well cultivated as the rich loams of Kent and Berkshire. There is as much merit in the turnips upon sand, as in the beans upon clay. The sainfoin on chalk and flints lay claim to the same merit as the wheat and hops of the deeper loams. Such spectacles are common in England, the same principles governing the cultivation of counties absolutely distinct in soils ; but step out of Flanders or Artois into Picardy, or out of the Plain of Alsace into Lorraine or Franche Comté, and all principles, connections, combination, and ideas are all broken ; you are in a new kingdom ; you pass a line of separation between common sense and folly. Here you are in a garden ; cross a river, and it is the field of the sluggard :—on one soil the human mind seems active and alive, on the other it is torpid and dead. It will, perhaps, be found that this singular fact depends on government ; but this is not the proper place for the inquiry.

PLAIN OF LIMAGNE.

Some pieces fallowed : stubbles ploughed to put in another crop. No fallow ever known at Vertaizon Chauriet. Rye after hemp, and then dung for hemp again. Wheat after beans, and after rye also, and rye after wheat. Plant cabbages directly after hemp : 1, barley ; 2, rye ; 3, hemp ; 4, rye. The reason for sowing rye in this rich vale is singular ; they assert that it is too fertile for wheat. Dr. Brés shewed me his best land sown with rye, and his worst with wheat : this plant on the rich land runs so much to straw, that the produce is small. It is evident from these few *traits*, that they understand the right management of their fertile plain very indifferently ; and that, in this material part of the farmer's art, they are backward and uninformed.

PLAIN OF THE GARONNE.

In travelling southward from the Limosin, it is a remarkable circumstance that fallows never cease till maiz is met with ; but that afterwards this plant becomes the preparation for wheat in the course, 1, maiz ; 2, wheat ; and this

husbandry commences at no great distance from Creiffensac, in Quercy; here begins also the culture of what they call *gieyse*, which is a *lathyrus*, I believe *sitifolius*, and also *jarash*, the *vicia lathyroides*. These plants are sown both in September and the Spring, and assist in banishing fallows. Turnips are there found likewise, and more than in most other parts of France; they are a second crop sown after wheat and rye. Not far from Cahors four other articles are found in common cultivation, viz. a *vicia sativa varietas*, the *cicer arietinum*, the *ervum lens*, and the *lupinus albus*; but maiz as a preparation is of much more consequence, and hemp of yet greater; by means of which articles, fallows on the rich land are unknown; but upon the inferior ones they are found as every where else in France.

The leading features of husbandry in this rich plain of the Garonne, are similar to what I have already remarked in the preceding districts. Where the soil is of such capital fertility, as to demand nothing that bears the resemblance of improvement, crops the most profitable are crowded in; and the land is well cultivated, though with little merit in the cultivator: but where inferior soils demand something more of exertion, there is here, as in all other parts of France, an absolute blank; a fallow is the immediate resource, and you step at once from good into execrable management. The turnip culture of Quercy is a singular circumstance in French husbandry; I was not there at a season that enables me to speak of the methods in which that plant is cultivated, nor of the success; but as we saw many fields uncropped, in preparation for it, I am willing to believe that they really have the culture; and yet the universality of *raves* in France, called *rabbet*, *rabboules*, &c. &c. another plant, and much inferior to the real turnip, do not leave me entirely free from suspicion. I thought the question merited attention, and I procured a few seeds, which I sowed at Bradfield; I had but two plants; one was a turnip, but of a habit and size very much inferior to our own; the other was a rave, that is to say, with a carrot root (not at all like a tankard turnip), long, thin, poor, and, compared with turnips, of no worth. They have many of them in culture near Caen, in Normandy, in the road to Bayeux. It is plain the *navets*, cultivated in Bresse, are also the same plant, from the description of Mons. Varenne de Fenille, who says they are like turnips, *à cela près que sa forme est plus alongée* *. The culture of the *lathyrus*, of vetches, and of the varieties of pease, &c. in the same province, are points of merit; and the more so, as they are found in considerable quantities on soils which, though rich, do not equal the exuberant fertility of the lower vales. The most singular circumstance in the preceding minutes, is the infinite importance of the culture of maiz. From Calais to Creiffensac, in Quercy, you never once quit fallows; but no sooner do you enter the climate

* *Observ. sur l'Agricult. p. 42.*

of maiz, than fallows are abandoned, except on the poorest soils: this is very curious. The line of maiz may be said to be the division between the good husbandry of the S. and the bad husbandry of the N. of the kingdom. Till you meet with maiz, very rich soils are fallowed, but never after; perhaps it is the most important plant that can be introduced into the agriculture of any country whose climate will suit it. It is a more sure crop than wheat; its product, in the food of man, is so considerable, that the populousness of a country is necessarily very different without, or with this article of culture; it is, at the same time, a rich meadow for a considerable part of the summer, the leaves being stripped regularly for oxen, affording a succulent, and most fattening food, which accounts for the high order of all cattle in the south of France, in Spain, and in Italy, in situations that seem to deny all common meadows. It is planted in squares or rows so far asunder, that all imaginable tillage may be given between them; and the ground thus cleaned and prepared at the will of the farmer, is an invaluable circumstance; and finally, it is succeeded by wheat.—Thus a country, whose soil and climate admit the course of, 1, maiz; 2, wheat; is under a cultivation that, perhaps, yields the most food for man and beast, that is possible to be drawn from the land; for as to potatoes, it would be idle to consider them in the same view as an article of human food, which ninety-nine hundredths of the human species will not touch. They have in provinces, where the people will live on them, a similar, though perhaps an inferior merit. But maiz has the additional advantage of affording the best food that is known for fattening oxen, hogs, and poultry, by grinding, or otherwise preparing the seed; thus affording a meadow to feed your cattle in summer, and grain to fatten them in winter. In some of the minutes, mention is made of a practice which deserves attention, namely, that of sowing it broadcast, and thick for mowing to soil cattle. In the south of France, the climate permits this so late, that such sowing is always for an after-crop—and never done except after the reaping of some other produce. Such practices should convince us of the superiority of the southern climates; and ought to instigate the farmers in our northerly ones to emulate these examples as closely as possible, by adopting the principle, though we have not the power to transfer the plant. Ploughing our stubbles not *after*, but *in* harvest, for turnips, and coleseed, approaches as nearly as our climate will admit. We have had a variety of turnips, and cabbages, and other plants introduced. I wish we had a turnip that would bear this late sowing better than the common one. I cannot quit this subject, without remarking, that a very sensible French writer, speaking of the culture of maiz in Bresse, and particularly of sowing the land every year in the course of, 1, maiz; 2, wheat; condemns it:—*ces usages me semblent pernicieux**; and in an-

* *Observ. Exper. et Mem. sur l'Agricult. par M. Varenne de Fenille.* 8vo. 1789. p. 24.

other place recommends fallow.——I am sorry to say, that this great point of the arrangement of crops is as little understood by the enlightened world in France, as by the peasants themselves; one can hardly give a more striking instance than that of an *économiste*, who says, “clover does so much good to land, that you may take two or three successive crops of oats, before sowing the land with wheat*.

General Remarks.

Throwing these several rich districts together, in union with one which I know by report only (the Bas Poitou), amounting in the whole to a territory almost as large as England, we cannot but admit, that France is in possession of a soil, and even of a husbandry, that is to be ranked very high amongst the best in Europe. Flanders, part of Artois, the rich plain of Alsace, the banks of the Garonne, and a considerable part of Quercy, are cultivated more like gardens than farms. Perhaps they are too much like gardens, from the smallness of properties; but this is not the place to examine that question, which is curious enough to demand a more particular discussion. The rapid succession of crops; the harvest of one being but the signal of sowing immediately for a second, can scarcely be carried to greater perfection: and this in a point, perhaps of all others the most essential to good husbandry, when such crops are so justly distributed, as we generally find them in these provinces; cleaning and ameliorating ones being made the preparation for such as foul and exhaust. These are provinces, which even an English farmer might visit with advantage. Such praise, however, cannot be given indiscriminately; for fallows disgrace, in some rich districts, the finest soils imaginable: a country can hardly be worse cultivated than Picarday, Normandy, and the Pays de Beauce; every acre of which provinces would admit the exclusion of fallows, with as much propriety as Flanders itself. In the Pays de Caux, where fallows are very much excluded, for want of understanding the right arrangement of crops, their noble soil is full of beggary and weeds.

DISTRICT OF HEATH.

To detail all the barbarous rotations, which ignorance has spread through Bretagne, Maine, and Anjou, would be tedious; the general feature of their management is to pare and burn the fields exhausted, abandoned, and by time recovered, that a succession of crops may bring it once more into the same situation. Great quantities of buck-wheat are found every where. In St. Pol de Leon there is a better conduct; parsnips are found; but broom is, even there, an object of profit. Common course, 1, broom, sown with oats; 2, 3, 4, broom; it is cut the fourth year, but fed all the four: 5, wheat; 6, rye; 7,

* Encyclopædie. Tom. 5. p. 686. Folio.

buck-wheat; 8, oats, or broom.—This most singular culture of broom is for fuel; the country has neither coals nor wood—and broom faggots sell so well, that a good arpent is worth about 400 liv. or about 16l. 16s. an English acre. But it is of a height and thickness of produce, in St. Pol de Leon, much exceeding any thing I have seen; and they say, that four years growth of broom improves the land.

Observations.

The vast province of Bretagne, which bears a near resemblance to Maine and Anjou, is perhaps as striking an instance as Europe affords of the immense importance of the right arrangement of crops; a great portion of all the three provinces is under cultivation, even a regular cultivation, however barbarous; yet so infamously cropped, that almost the whole must appear to a traveller an absolute waste. It was to me an astonishing spectacle, to see such a wretched state of agriculture in a province like Bretagne, which I knew enjoyed some of the most valuable privileges in the kingdom; which possessed one of the greatest linen fabrics in Europe; and which was surrounded in every part by the sea, and abounded with ports and commerce. But Flanders itself would, if cropped like Bretagne, become poor and contemptible. A great portion of the three provinces above-mentioned is adapted to sainfoin, and yet a sprig of it is not found. Every acre that I saw was perfectly well adapted to turnips and clover, and consequently to the Norfolk husbandry; but there is nothing except broom, furz, weeds, waste, and corn. Not an appearance of any thing for the winter-support of cattle and sheep, except straw. These provinces are admirably calculated for sheep; but the number is too inconsiderable to be noticed. A change of the rotation of crops is the only thing wanted to alter the face of these provinces. It would be an impropriety to say, that government and feudal oppressions are the sole cause; and that if these are not reversed, nothing could be done; for the rich proprietors and wealthy farmers, the number of whom is very considerable, as well as the nobility themselves, have their estates and farms exactly in the same condition, cropped in the same manner, and covered with the same quantity of weeds and rubbish. Considering how well adapted the soil and climate are to sheep much the greater part of all the three provinces ought to be in some such course as this; 1, turnips; 2, barley; 3, clover; 4, wheat. Also, 1, turnips; 2, barley, or oats; 3, artificial grasses, for three years; 4, wheat; 5, winter tares, pease, beans, or buck-wheat; 6, wheat; with no other variation than taking the winter tares, pease, and beans immediately on the lay, if the ground abounded with the red worm; and wheat following. By such courses, these provinces would produce more than the double of what they do at present.

GASCOIGN.

I must, in the first place, remark, that the lands in which the preceding courses take place, are but a small part of this heath division, which is mostly either mountain, waste, or *lande*; and that the *landes*, or heaths, of Bourdeaux cover two hundred square leagues of territory; not absolute waste, but cropped with pines for resin only. And there are other vast tracks that yield little besides fern, and other spontaneous rubbish. In the small districts that are under cultivation, husbandry, as it appears from the preceding minutes, is infinitely better understood than in the other great division of heath, Bretagne, &c. It is, on the contrary, in some places practised on very enlightened principles; a circumstance that must, if ever those wastes become cultivated, have very powerful effects in spreading there that good system already established in the country.

About St. Palais to Bayonne, many turnips in a singular husbandry. I observed several fields quite black, and demanding what it was, found it the ashes of burnt straw: I afterwards saw them strewing straw thickly over the land. They do this on a wheat stubble, but do not think they leave stubble enough, and therefore spread much straw, set fire to it, and it burns all weeds as well as itself, cleaning as well as manuring the land. As there are immense wastes through all the country covered with fern, I asked why they did not burn that, and keep their straw? The reply was, that they preferred fern for making dung, cutting a great deal of it for litter. As soon as burnt they plough and harrow. They hoe and hand-weed, as I was told. After turnips sow maiz, in this course, 1, maiz; 2, wheat and turnips; which is certainly deserving of commendation.

St. Vincent.—They sow clover among maiz in August; at the the end of April or the beginning of May the clover is cut once, yielding a fine crop, sometimes three feet in height; it is then ploughed up, and maiz planted again; after which something else. Another course is to sow rye; after that millet; and with this *barricots*, or kidney-beans.

Dax to Tartas.—They have three crops in two years in this course; 1, maiz; 2, rye, and then millet. Clover, called *farouche*, is sown alone throughout the country, at the beginning of September; mown for hay in spring, and ploughed for maiz, in which case it is after rye, instead of millet: nothing can be better husbandry.

To St. Severe good maiz; much land ploughed ready for clover. All the men and women in the country now hoeing millet (August 17th), on three feet ridges, with three irregular rows on each ridge; clean as a garden. 1, Maiz, and in August turnips sown among it; 2, spring wheat sown in January or February,

bruary, which is nearly as good as autumnal; 3, clover sown in September and mown, fine crops, in March or April; 4, maiz planted again; and sometimes flax sown among maiz in September and gathered in April:—no fallow. Excellent! These are rotations of a superior kind; all the rest in the district are bad.

General Observations.

What is equally applicable to all countries, that are, for the most part, uncultivated, or at least in a very waste or rough state, like much in Gascoign, Anjou, and Maine, but chiefly in Bretagne, is the proper use and application of paring and burning; when such lands are in some degree of culture, but not entirely reclaimed, this mode of husbandry, properly used, is excellent; on the contrary, as applied here, it is a most barbarous and mischievous practice. The common method we have seen is to burn periodically, and to sow immediately wheat, rye, barley, or oats, as long as the land will yield a crop worth the reaping; then to throw it aside, as if of no further value, and leave it to recover itself under a coat of weeds, broom, fern, furz, or any rubbish that may come. Abominable courses of crops, like these, have brought the practice of paring and burning into most unjust disrepute in every country in Europe. But such a general condemnation is one instance in a thousand of that utter want of discrimination which is so pernicious in agriculture. Paring and burning, properly managed, that is, in a judicious course of crops, is one of the most excellent methods of ameliorating land; but it should always be made the preparation for grafs, and not immediately for corn; and it is in this case, as in many others, that the man who would wish to act on sound and sure principles, should bend his views to get grafs on his lands, not ill termed a *layer* in Norfolk and Suffolk. Let him insure grafs, and he needs not be anxious for corn; he has it when he pleases. Paring and burning should always be given for a crop, that cattle may eat on the land, either rape, cabbage, or turnip, as the great mass of alkaline manure should have a mucilaginous one to act upon. A crop of corn, barley or oats (the latter best) follows, because you cannot get grafs profitably in such a climate as Bretagne, Maine, or Anjou without corn. In Gascoign, where it may safely be sown in September, the necessity of corn is not equal. With this first sowing of corn, the grafs seeds most suitable to the soil should be sown; they never fail in such a case. And having a fine, clean, and uncontaminated produce of grafs, you may keep it as long as it is profitable, and answers your purpose; and after that you may break it up for corn, with a physical certainty of seeing none but crops large in proportion to the soil. And in the whole management of laying down, this rule ought never to be departed from, viz. of not letting wheat, rye, barley, or oats follow

follow one another, without a hoeing and ameliorating crop intervening. Let such principles govern the wastes of Bretagne, and animate the heaths of Maine and Anjou; and the traveller will not then curse them for *sombre*, desolate, and neglected provinces, but hail the influence of happier days!

DISTRICT OF MOUNTAIN.

To Perpignan from Spain, July 21st, stubbles ploughed up and sown with millet. No idea of a fallow, where water is at command, substituting clover, harricots, millet, and maiz; but the last not in a large quantity. Their clover culture is very singular; they plough their stubbles the beginning of August, and clover seed is harrowed, or rather rubbed in by a piece of wood fixed to the plough. This clover produces much luxuriant and valuable food for sheep and lambs early in the spring; after which it is watered, and produces by the end of May a full crop of hay. It is then ploughed up, and harricots, maiz, or millet, planted, either of which is off in time for putting in wheat—and after the wheat, another crop of harricot or millet is taken; two crops are therefore gained every year. But where they have no water, fallows are known, which prepare for wheat. The fallow, however, is made on good land to produce millet, harricots, or barley, for forage. In the whole vale from Narbonne to Nîmes, the principal objects are vines, olives, or mulberries; but the vale land, wherever good, yields much wheat; some parts of it being a considerable corn country.

Dauphiné—Montelimart.—Immediately after the wheat harvest some buckwheat, which is now (August 23d) in full blossom; this, on comparison with England, is gaining a full month of us, which, at this season, gives two crops, instead of one. With a judicious management, they might have as good turnips after wheat, as we get with almost a year's preparation. Monf. Faujas de St. Fond found all his farm in the fallow course; but now there is none, by means of sainfoin and clover. Another most singular circumstance, which shews what climate will do, is, that Monf. Faujas has potatoes eighteen inches high, planted on the ground which produced wheat this year.

Observations.

So far as my minutes were taken, fertile vales, however narrow or inconsiderable in extent, may be supposed to partake nearly of the character of richer districts. The principal range of mountains here crossed, is the volcanic country of Auvergne, Velay, and Vivarais; what cultivation I saw in them is very bad, and not to be commended, but for its being carried to so great an height; it climbs up into regions, where nothing but the greatest industry, animated by property,

property, the most powerful of instigations, could possibly lead it. But in the modes pursued by these proprietors, whose possessions are very small, there is little that calls for our attention. They are, in general, unenlightened, and practise the worst courses, with as unremitted exertions as the best. The principal, and perhaps the best feature of those mountains, are the chesnuts, which are numerous, and yield a considerable revenue to the proprietors. The mountains of Provence, which I saw both in the neighbourhood of Tour d'Aigues, and on the coast of the Mediterranean, are in general a miserable waste, and afford no other exhibitions of culture, than such as had perhaps be better omitted; to look for proper courses of crops, in such cases, would be absurd. The mountains of Provence, towards the Alps, by Barcelonetta, &c. are covered, as mountains always ought to be, with herds of cattle, and flocks of sheep.—The proper application of mountainous regions, is pasturage; whatever cultivation takes place, should be absolutely subservient to the endeavours, after raising the greatest possible quantity of winter food for cattle and sheep. Wheat, rye, or other crops, to feed the families of the farmers, are, on comparison with this, of very trivial consequence. The courses of crops should therefore be not much more than an arrangement of turnips, cabbages, rape, potatoes; with the cultivated grasses, that give the largest products of hay—and with corn, but in subservience to the rest. Such a system, however, will not be found on these mountains; nor is it a wonder that the great object of cattle and sheep should not be understood in remote provinces, when they are so grossly neglected even near the capital, where all their products are sure of an immediate market.

DISTRICT OF STONY SOILS.

This miserably cultivated division of the kingdom, which presents so few practices in common husbandry that deserve attention, offers nothing in the minutes that calls for notice, except the introduction of potatoes in some of their courses; that root being much more cultivated in Lorraine and Franche-Comté, than in any other parts of the kingdom with which I am acquainted. The general arrangement of crops, throughout these provinces, being the common rotation of a third fallow, a third wheat or rye, and a third barley or oats, has resulted from the great quantity of open land therein subject to common rights; it is, however, a disgrace to the cultivators, that they too often pursue the same miserable routine in their inclosures. It would be useless to dwell on such husbandry; it is enough to class these provinces among the worst cultivated ones (vines excepted) that are to be found in the kingdom; and, considering the extent of the open fields, there is very little probability of their amelioration.

COURSES OF CROPS.

DISTRICT OF CHALK.

Through the province of Sologne, the general rotation is, 1, fallow; 2, rye; it is the most wretched of all the French provinces, as more than once observed. The soil is all a sand, or a sandy gravel, on a white marl bottom; in some places quite chalky; and in others a clay marl, but white; and if we can judge by the size and growth of every sort of wood, it has sufficient principles of fertility for the production of any crop, well adapted to the nature of its surface. In every hole, and in every ditch there is stagnant water; so that in a dry sandy country one of the first improvements would be a partial draining, which is an extraordinary circumstance. I have rarely seen a country more susceptible of improvement of the most obvious nature; nor any better adapted to the Norfolk husbandry of 1, turnips; 2, barley; 3, clover; 4, wheat; rye has no business here, if the land was marled and thrown into the turnip and clover management; not the clover alone without turnip (which has been the common blunder of half the improvers, as they have called themselves, in Europe), but by considering a good crop of turnips, fed on the land by sheep, as the parent of clover, without which that grass is but a poor matrix for wheat, on any but rich soils. The misery of this *triste* Sologne, as the French writers call it; the poverty of the farmers, the waste state of every part of the country, result, in no inconsiderable degree, from the courses of crops practised; the least and most obvious change of them would give a new face to this desolate province. It is hardly possible to suppose worse husbandry than what is found, I may almost say through every acre of the other provinces, which form the rest of this extensive calcareous district. Where the land is good, they crop without mercy; and where it is bad, they have nothing but fallows and weeds, instead of turnips and sainfoin. All the ideas that regulate the agriculture of these chalk provinces must be absolutely annihilated, before any cultivation can be introduced that can make either individuals easy, or the community prosperous. It is a strange spectacle to see vineyards kept in the most beautiful and garden-like order, and all the arable lands around them nothing but filth and weeds; and cropped in courses that either render them foul or sterile. A considerable portion of these calcareous districts should be thrown into sainfoin courses; and the rest in rotations of cattle and corn:—one year producing food for cattle and sheep, and the next food for men or horses.

DISTRICT OF GRAVEL.

To give any table of the courses pursued in the two provinces of the Bourbonnois and Nevernois would be needless, since but one feature is found throughout them;—1, fallow; 2, rye; a system to which they must be strangely partial;

partial; for it is found in a country of which nine-tenths are inclosed, and at the command of farmers to sow what they please. It is not produce and success that should make them in love with fallows; for the farmers are as poor as their crops: the common produce is four times the seed, and they have often less; and with all this ploughing and fallowing, which, according to some visionaries, are essential towards keeping land clean and in heart, the soil is in such a state of degradation, that they actually find it exhausted by their management, and to restore it to some degree of fertility, they leave it to weeds and broom for seven or eight years, in order to recruit the soil, which fallows cannot effect. The world perhaps cannot afford a completer instance of the futility of the practice*. From what I observed of the Bourbonnois, and I examined it with particular attention, as I had no small temptation to become a farmer in it myself—the whole agriculture of it should be subservient to sheep; and the course of crops so arranged, as to keep, by means of turnips and durable cultivated grasses, as large flocks as possible. For corn, trust to turnips, grasses, and sheep: such tools must be badly handled indeed, if they will not make corn!—and very different corn from the beggarly rye at present in these provinces.

DISTRICT OF VARIOUS LOAMS.

It is rather a singular circumstance that turnips, or, if not turnips (for I was not there at the time to see them), raves, with roots large enough to fatten very good oxen, should in these provinces be not at all uncommon; and yet that the culture should hardly have any effects in improving their husbandry: the fact deserves attention. I have been finding fault throughout France with their want of turnips; and here they are; and yet am I not satisfied!—So a Frenchman would exclaim. But the case is a comment on the importance of deeply studying this most interesting branch of husbandry. It is not turnips that are so much wanted as a good course of crops. A five-and-twentieth part of a farm sown with turnips, which are followed by wheat, may be practised till doomsday, before a farm will be improved; but let the turnips be eaten on the land by sheep; sow barley and clover with it, and take the wheat on the clover; and do this once on four acres; you will then do it on fourteen, and then on forty. But we may easily imagine how well turnips are understood in a country where the predominant course is fallowing for rye. The best feature in their husbandry does not come within the scope of this chapter, viz. that of fattening oxen with

* I have heard some practical farmers in England assert, that rye does not exhaust; or, at least, much less than any other sort of white corn; if this be true, the exhausting of these provinces is by the operation of fallowing; and the land recruiting, under weeds and broom, seems to speak the same language.

rye meal, and with the small quantity of turnips which they have. So far as they support cattle by *arable* crops, their merit is considerable; and is one material step towards remedying the great deficiency of French husbandry; but in regard to the arrangement of their crops, they are as barbarous in their practice as their neighbours.

General Remarks on the Courses of the Crops in France.

The particular errors of the respective districts, which fell within my knowledge, having been already noted and commented on, there remain at present some more general observations on such circumstances as are applicable to the whole kingdom. Whatever merit has been found depends on one of these two points, either upon an extraordinary fertility of soil, as in the case of Flanders, Alsace, and the Garonne, or on the culture of a plant particularly adapted to the southern and middle climates of the kingdom, that is maize. But as this plant is not found on bad or even ordinary soils, the poorer ones, in the same climates, are abandoned to nature, or to fallows. It is a most singular circumstance, that the worst soils in England are the best cultivated, or at least as well cultivated as the most fertile; and that in France, none but capital ones are well managed.—When I come to explain the connexion between government and agriculture, this will be accounted for. The leading mischief, in most of the courses of crops throughout France, is the too great eagerness to have as much wheat or rye as possible. A vast population, and a subsistence which experience has proved precarious, have been probably the occasion of it: but the blindness of the conduct can, with enlightened persons, admit of no doubt. The more wheat you sow, the more you do not reap; and that land, which is kept by means of large stocks of cattle and sheep in good heart, will yield more when sown but once in four years, than with fewer cattle it would do if sown every third year. In the arrangement of courses, it is necessary to throw all such views absolutely out of the question: that conduct, in this respect, which is suitable to an individual, is proper for a nation. It rarely answers to a man to change his purpose in the cultivation of his farm, on account of some transitory expectation of a price; he ought to sow his ground with the plant best adapted to his general views, and to the state of his land: and not swerve from his purpose on the speculation of any particular view; and in like manner, it will always be for the national benefit, that the lands should be sown with whatever crop is most suitable to them, and whose product will pay best, when valued in money. A populous and rich country can never want bread to eat, but from the fault of its government, attempting to regulate and encourage what can flourish by absolute freedom only: the inhabitants of such a country will always command wheat, because they can afford to pay for it: and her own farmers will never fail
of

of raising that, or any other product, in any quantity demanded, provided they are not impeded by injudicious laws and restrictions. In these principles, it is necessary to consider all products as equally beneficial, provided they may be equally converted into money. The quantity of rye, in every part of France, even in the richest provinces, is probably one of the grossest absurdities in the agriculture of Europe; wheat is almost every where stained with it, to use the farmer's language. Yet throughout that whole kingdom, there is hardly any soil to be found bad enough to demand rye. All, generally speaking, is sufficiently good for wheat. In part of Sologne, near Chambord, there are some poor sands, that would not answer well for wheat; but there being a rich marl under the whole, if improved and thrown into the turnip and clover husbandry, it would yield more wheat than it now does rye; the same observation is applicable to the poorest lands of the Bourbonnois and Nevernois; after these, there are but very partial spots that would not yield wheat. In considering, with respect to the national interests, the proper courses of crops for France, two circumstances should be had in remembrance, which may not at first be thought to bear upon the question; it is the quantity of forest necessary in a country that either has not coal, or does not use it; and the vast tracks that are under vines. These are subjects that demand notice under other heads, but here they should be mentioned to shew, that while the quantity of arable land is thus prodigiously lessened, attention to banish fallows, and introduce proper courses of crops, becomes of the highest importance. When we reflect, that from a sixth to a seventh of the kingdom is occupied by wood, and that the space covered by vines, is exceedingly great, at the same time that the wastes are in some provinces of enormous extent, it will appear amazing how so numerous a people are fed, with a third or fourth of all their arable land incumbered, not cleaned, by barren fallows.

There are practical farmers in England, who think fallowing necessary; and there are no practices in the minutiae of the farmer's business, but will in every age meet with those who strenuously support and defend them. There is no period without some favourite schemes, every one of which may, under certain circumstances, have merit; but the politician has nothing to do with such questions; he must either consider husbandry in its great outlines, or he cannot consider it all; he must view the richest and best cultivated countries, and see whether all the lands in such are not every year productive; he must enquire if sheep and cattle in great quantities are not essential in a thousand respects; whether manure does not depend on them; and whether corn does not depend on manure; he will ask whether the conversion of the turnips of Norfolk, the beans of Kent, the cabbages and carrots of Flanders, the maiz of Guyenne, or the lucerne of Languedoc, into fallows, would in such provinces be esteemed
national

national improvements? He will conclude, that as sheep and cattle cannot possibly abound where fallow rotations are pursued, the first and most obvious improvement is to make the fallows of a country support the additional cattle and sheep wanted in it. He will draw this conclusion in the outline, because he will see the fact established and practised in the best cultivated countries, let their soil be what it may. The particular modes of applying the general principle he may not understand, but the leading principle is obvious to common sense. The practice, however, of districts, and even of individuals, speaks the same language most decisively. To compare this spot with that is not the business;—but that country, that farm, will be most improved and most productive upon which the greatest quantity of cattle and sheep is kept. This holds good of an acre, a field, a farm, a district, a province, or a kingdom. This point, of such infinite and national importance, depends absolutely on the courses of crops. Reiterated and satisfactory experiment has proved, that two crops of white corn ought not to come together; instances may possibly be quoted to the contrary, but to reason on particular exceptions would be endless. If this rule be broken, it is generally at the expence of cattle and sheep, and of dung; and whatever is purchased at that expence is purchased dearly*. Out of such a maxim, the right conduct rises naturally: it supposes corn and cattle crops alternate; part of the arable, therefore, maintains cattle, and part yields corn. This will decide the nature of the crop; for cattle and sheep must be supported in winter as well as in summer; the crops for each season must, therefore, be proportioned to each other, and the arrangement must be such as preserves the land clean. It would be evidently useless to take notice of the variety of cases that may admit variations, without militating against the leading principles of such a deduction. Land may be so rich as to want neither cattle or sheep; it may, like some on the Garonne, produce hemp and wheat for ever; it may be so near a great city, that purchased manure may make other courses more eligible; certain crops may be in such demand, as to make it desirable to cultivate them by way of fallow, though not for cattle or sheep, as coleseed for oil, tobacco, flax, and other articles. Such exceptions, which in the nature of things must be numerous, are, in no respect, contrary to the leading principle that ought to govern

* It is not from theory or reasoning, or even from the view of the farms of others, that these ideas are suggested; my own farm supports me in the opinion. The average rental of it is pretty exactly the average rental of England; but if the kingdom in general were equally stocked, it would contain twenty-two millions more of sheep than it does at present, near one and a half million more of cattle, two hundred thousand fewer horses, and between two and three millions more of people. This is a system which may be called national and political husbandry. There are, doubtless, men who will ask me if my crops are drilled? If I horse-hoe very well? If my hedges are clipped? Or my ridges high or low, broad or narrow? Or, perhaps, whether my sheep have horns, or my gates painted? It is in agriculture as it is in morals; a virtue purchased at the expence of a greater virtue, becomes a vice.

throughout

throughout this inquiry. For the winter support of cattle and sheep, there are turnips, cabbages, potatoes, rape, carrots, parsnips, beans, vetches; for the summer sustenance, cultivated grasses of all kinds, which should necessarily be adapted to the quality of the soil, and to last in proportion to the poverty of it, and to the nature of the grass. Hence then some courses arrange themselves that are applicable, perhaps, to all the soils of the world.

1, Roots, cabbage, or pulse.

2, Corn.

3, Grasses.

4, Corn.

And, 1, Roots, or cabbage.

2, Corn.

3, Grasses.

4, Pulse or maize, hemp or flax.

5, Corn.

And in these the chief distinction, relative to soil, will be the number of years in which the grasses are left: there are variations in particular cases, but the number is inconsiderable. To enlarge upon and explain such cases, to shew in what manner they clean and improve; and to point out what the variations ought to be for adapting the general principle to particular soils and situations, would be a proper business if I were writing a treatise of agriculture, but would be misplaced in the rapid view which brevity obliges me to take as a traveller. With these principles for our guide, we may venture to assert, that the generality of the courses of crops in France, and all of them on indifferent soils, are absolutely inconsistent with the profit of individuals, and with national prosperity. When Louis XIV. beggared his people, in order to place a grandson of France on the throne of Spain, and to acquire Flanders and Alsace, &c. he would have rendered his kingdom infinitely richer, more prosperous, and more powerful, had he banished the fallows from half a dozen of his provinces, or introduced turnips in some others; there is scarcely a step he could have taken in such an improvement of his agriculture which would not have given him more subjects and more wealth than any of his conquered provinces; every acre of which was purchased at the expence of ten of his old acres rendered waste or unproductive; nor was one Fleming or German added to his subjects, but at the expence of five Frenchmen.

When the importance of attending to COURSES OF CROPS is thus manifest and striking, we shall know pretty well how to estimate the merit of the forty societies of agriculture that are in France, by the subjects about which they busy themselves.

C H A P. VI.

Irrigation.

NONE of the least consequence in crossing from Calais to La Marche.

La Ville au Brun to Bassie.—Meet with it first. The quicker the water runs off, the greater the improvement. Flat lands are improved, but the rushes not destroyed. The best water is the coldest—and immediately as it issues from the spring. Seldom irrigate in winter: cut but once. It is plain the practice is but ill understood here.

LIMOSIN to Limoges.—Every spot of land in the mountains is watered that is possible; and with such attention, as marks how sensible they are of the importance of this improvement. The water is conducted very high up the slopes of the hills; and, in several instances, I was at a loss to conjecture from whence it was brought. But in the low flat bottom it is badly done, with lines of rushes along the carrier-trenches, and little attention paid to the conducting of the water away speedily enough.

Ufarch.—Water with great care; in summer they prefer spring water just as it issues from the earth; but, in the beginning of the spring, river water.

ROUSILLON—Perpignan. Great exertions in watering in the vale lands, and perfectly well understood. The richest arable, of the vale at Pia, fells, if not watered, at 600 liv. the minatre (20l. 9s. 6d. per acre), but the watered lands at 1000 liv. (37l. 9s. 10d. per acre). Near Perpignan, a considerable aqueduct for it. From Perpignan to Villa Franche, great exertions. They prefer, in many places, clear water—and the nearer to the spring the better.

LANGUEDOC.—Through all this province it is much practised, and with great success.

Gange.—Coming out of this town, I was surprised to find by far the greatest exertion in irrigation I had yet seen in France; a solid flank of timber and masonry is formed across a considerable river between two rocky mountains, to force the water into a very fine canal, in which it is, on an average, six feet broad by five deep, and half a mile long; built, rather than dug, on the side of the mountain just under the road, and walled in like a shelf—a truly great work, equally well imagined and executed!—A wheel raises a portion of the water from this canal thirty feet, by its hollow periphery. An aqueduct, built that height, on two tiers of arches, receives the water, and conducts it on arches built on the bridge, across the river, to water the higher grounds; while the canal below carries the larger part of the water to lower fields:—an undertaking

undertaking which must have cost considerable sums, and shews the prodigious value of water in such a climate.

St. Laurence—Lodeve.—Within a few miles of Gange, another similar irrigation; the water taken from the river in the same manner, and lifted equally high by another wheel; this is just by the chateau of Madame la Marquise de Gange. For the whole way through these mountains the exertions in watering are prodigious; there is not an inch capable of being irrigated, over which water is not thrown, conducted on the slopes of the mountains every where possible.

Beg de Rieux.—Every where watered that is practicable; and the bed of a river laid so dry, from its water being all taken for irrigations, that it is curious to view.

Campan.—Lands, with water at command, sell at 600 liv. the journal (49l. 17s. 6d. per acre), of 700 cannes (about 19,600 feet), but not watered, from 300 to 400 liv.

Bagnere—Bigore.—Arable vale watered, and with great success.

GASCOIGN—St. Vincents to Dax.—Several streams above wastes or bad lands, and no use made of them.

To Tartas.—Several more.

Beauvoisais.—Some watered meadows pretty well done, which is an extraordinary thing in this part of France.

NORMANDY—Neufchatel.—Practised for meadows, but not well.

Falaise.—A vale of watered meadows that produce 100 liv. per acre, 22 feet to the perch (3l. 10s.)

BRETAGNE—Belleisle.—Some scraps attempted to be watered, the first I have seen in this province, but ill done, and the water not carried off.

ANJOU—Tourbilly.—Irrigation absolutely unknown in the country, though good opportunities are not wanted.

MAINE—Beaumont.—Fine streams through all the country, but no use made of them.

NORMANDY—Bernay.—Some near the town, cut for the second time, Oct. 3.

ALSACE—Isenheim to Belfort.—First appearance in Alsace, and not well done.

BOURBONNOIS—Moulins.—Mons. Martin, the gardener of the royal nursery, who is from Languedoc, waters his garden after the manner of that province. A Persian wheel of buckets raises the water from a well twelve feet, the receiver being placed so low as to have five or six of the buckets emptying at a time, and very little water is lost; not the twentieth part, according to all appearance. A horse turns the wheel. It raises 200 poinçons, each of 200 bottles, an hour. The water is conducted by small channels to all the beds that want it.

AUVERGNE—Riom.—For two or three miles, a most noble irrigation, in a part of the rich vale of Limagne. The carrier-trenches all crowded with double rows of willows. A fine second growth. Some land under corn that should be grass.

Clermont.—At Royau, the volcanic mountain sides all watered; but it is coarsely done.

Izoire.—Much practised; their gardens are planted in quick succession, by means of it: after hemp, cabbages immediately. The distribution of the water, in these gardens, is very defective; they throw it from the trenches, on to the beds with bowls, instead of flowing equally of itself. It probably arises from this circumstance, that their gardens and hemp-grounds are not so valuable as what they call *vergers*; that is, watered meadows planted with apples, and other fruit-trees.

LANGUEDOC.—From Riom to the Rhone, across Auvergne, Velay, and Vivarais, all lands are, for the most part, watered, that are capable of being so.

DAUPHINE—*Montelimart*.—Irrigation carried here to a considerable perfection. Close to the town, a septier, which is one-half of an arpent of Paris, lets at $2\frac{1}{2}$ louis d'or, or five the arpent, 120 liv. (6l. 2s. 6d. per acre). At a distance 60 liv. with obligation to dung every second year, which is remarkable: 100 septerees, that receive the washing of the city, lets at 5000 liv. besides 600 liv. for the winter feed of sheep. They are cut three or four times a-year. In Dauphiné, the water of springs is preferred to that of rivers, except of the Rhone, which is as good. And the reason they assign is, that the former never freezes, but river water does; and consequently improper to water with in winter. In summer, turbid water damages the grass.

PROVENCE—*Avignon*.—Irrigation is here carried on in great perfection, by means of the waters of the river Durance and the Crillon canal, made only for the purposes of watering. The meadows are mown thrice a-year, producing from 30 quintals of hay, at 40s. to 60s. the quintal, on each eymena of 21,600 feet (7 ton 14 cwt. per acre) at three cuts. Sell near the town such meadows to 1000 liv. (76l. 10s. per acre); further from it, 800 liv. (61l. 5s. per acre). If the season is dry, they are watered every twelve days; but in a moist time, once in three or four weeks. In some cases, they begin with turbid water, and finish with what is clear to clean the crop. Never water their corn at all, but in extraordinary droughts.

Lille.—The road from Avignon hither passes, for some miles, through the dead level of the plain; the whole watered with great attention. The channels for conducting the streams, appear to be traced with much skill, and the distribution is to every crop at will. There are many vines from which it is excluded; but it seems to be very ill management, to plant vines on land that admits watering. It certainly would not be done, if the profit on that crop were not very great. Much of this land is under clover and lucerne, watered; but the same, while in corn is not watered. And the effect of irrigation is such, that the clover (which is sown among wheat in autumn) is cut once for hay the same year in which the wheat is reaped: thrice the following year; and then either ploughed up for corn, or left for meadow; in which latter case, the chief

chief grass that comes is the *avena elatior*. The soil a white calcareous loam, till within four miles of Lille, and then a brown argillaceous earth, without stones three or four feet deep, apparently of great fertility, with or without water. At Lille, watered meadows sell at 400 liv. the cymena, and are cut thrice; but they complain of a want of water, which is extraordinary, for they seem to have the greatest command of it. It is raised into gardens by many wheels with hollow felloes turned by the stream, and conducted artfully into every bed.

Vaucluse.—The spring at this village, which will for ever be celebrated in the annals of love and poetry, ought not to be less so in those of cultivation. The waters are used in irrigation within three or four hundred yards of the rock from which they burst, and with great effect.

Orgon.—In going hither from Vaucluse, there is much irrigation. Near Ca-vaillon the land is, for that purpose, dug, and some even trenched. At Orgon the canal de Boisgelin, so called from its patron, the Archbishop of Aix, is a noble work, but unfinished; it passes here in a tunnel four hundred and forty yards through a mountain; it is twenty feet broad, and eight deep; has no water in it, as the work has stood still for some years, for want of money. The mountain it cuts is of chalk and marl; a stoney chalk, not at all like common lime-stone; and a stony clay also, but calcareous, with a fine chalky marl, twenty or thirty feet deep. Pass on the great road to Aix for about a league, all richly watered, and then quit it for Salon. Cross the above-mentioned canal, but without water in the midst of an arid stony flat, that would pay admirably for irrigation; but in the vale afterwards the canal de Boisgelin is finished; finely executed in stone, and quite full; and there are three others, so that the quantity of water here conveyed is very considerable.

La Crau.—By this term is to be understood the most singular stony desert that is to be met with in France, and perhaps in Europe. It is about five leagues every way, and contains, probably, from twenty to twenty-five square leagues: in twenty there are 136,780 English acres. It is composed entirely of shingle, being so uniform a mass of round stones, some to the size of a man's head, but of all sizes less, that that the newly thrown up shingle of a sea shore is hardly less free from soil. Beneath these surface stones is not so much a sand as a kind of cemented rubble, a small mixture of loam, with fragments of stone. Vegetation is rare and miserable. Some of the absinthium and lavender, so low and poor, as hardly to be recognized; and two or three miserable grasses with the *centaurea*, *calycitropa*, and *solstitialis*, were the principal plants I could find; and I believe, on recollection, an *eryngium*. I searched for the *lolium perenne*, but could not discover a single stalk, or any signs of it; I conclude, therefore, that this plant was all so eaten down, as not in this season (August) to be visible. After travelling some miles on this extraordinary desert, I asked my guides

if the rest of it were similar to what I had seen; and they answered me, that it was all alike, both in respect of soils and plants. The only use to which the uncultivated part is applied, is that of winter feeding an immense number of sheep (to the amount of a million, as I was informed, but which I doubt) that are summer-fed in the Provence Alps, towards Barcelonetta and Piedmont. If any think that a million are fed here, the number of acres must be much larger than I have mentioned. The reason why I arrange this stony region under the title *irrigation*, is on account of some very noble undertakings to water it, which deserve more attention than any thing else to be met with in it. In advancing from Salon into the Crau, at about four miles, the road crosses the canal of Boissgelin. The old canal of Crappone, at the same place, is seen distributing water in various directions, for the amelioration of one of the most arid tracks that is to be met with in the world. The canal de Crappone takes its waters from the Durance at La Roche, and carries it to the southern part of it at Istres. This canal is forty miles long. That of Boissgelin receives it from the same river at Malavort, and crossing the other divides into three branches; one of which leads to lands in the neighbourhood of Istres; the second, to St. Saumas and Magnan, and this part of the Crau; the third is a small one, that turns to the left towards Salon. In consequence of water being thus conducted to a region where it is so much wanted; some very capital improvements have been wrought. Some large tracks of the Crau have been broken up, and planted with vines, olives, and mulberries, and converted into corn and meadow. Corn has not succeeded; but the meadows I viewed, are amongst the most extraordinary spectacles which the world can afford, in respect to the amazing contrast between the soil in its natural, and in its watered state, covered richly and luxuriantly with clover, chicory, rib grass, and *avena elatior*. The mode in which the improvements were made, has been that of removing the stones for ploughing; these are laid in an irregular slovenly manner, by way of fences to the inclosures; and particularly in one part, where a new improvement has taken place near the road.—Upon the subject of watering this most singular district I had conversations with some gentlemen at Salon, who much question whether these improvement had answered, the expences having been very great. On this point, I shall presume to remark, that the great expence they put themselves to in removing the stones with so much care, does not seem to me to have been judicious. If I were to attempt the cultivation of any such track of ground, so level as this is in its natural state, I would conduct water with the greatest attention, but content myself with removing the largest stones only. I would sow the proper grass seeds on the shingle and water immediately; and aim more at converting the soil to good pasturage than to meadow. No ploughing and no other expence than grass seeds and irrigation would be incurred. After
some

some years watering, I should find the interstices of the stones filled with artificial mould; and then a very little labour would convert it to meadow. In such attempts undertakers are too apt to aim at complete improvements, and are dissatisfied if they do not bring such wastes at once to the resemblance of fields that have been long under cultivation; but to render such works profitable, enormous expences should be avoided; and something left to time to effect, silently but surely, and without other expenditure than that of a little patience. It is at least worth the experiment. I am much mistaken if *water* and *seeds* would not make very valuable pasturage, without other exertions, and perhaps better than with tillage. Monf. de la Lande speaks of the Canal de Provence, which takes the waters of the Durance to Aix and Marseilles, being 110,000 toises long; and of the irrigations, by it bringing in a million of livres a-year*.

Hyeres.—Never water corn, or any arable crop, except lucerne; unless it be in the greatest droughts. Yet it is here perfectly well understood, and is the great support of all the low grounds and slopes. They use it with great attention and success. They have a pretty contrivance for watering their gardens, out of a ditch seven or eight feet deep, never thinking of the miserable method used in England of carrying and spreading with watering-pots: on the contrary, they fix a post of five or six feet high on the bank of the ditch, and a long pole balanced for swinging every way on the top of it, with a pail at one end, and a stone for a balance at the other. A man, by dipping the pail, which he does incessantly, and emptying it into a trench cut for receiving the water, supplies a constant stream, which is conducted alternately to different beds, prepared in the same manner as for common irrigation,—a contrivance highly deserving the attention of those who have perennial ponds near their gardens.

Observations.

From the foregoing notes it appears, that in some parts of France, particularly in the southern provinces, this branch of rural œconomy is very well understood, and largely practised; but the most capital exertions are very much confined; I met with them only in Provence and the western mountainous parts of Languedoc. In the former, canals are cut, at the expence of the province, for conducting water many miles, in order to irrigate barren tracks of land: in England we have no idea of such a thing. The interests of commerce will induce our legislature to cut through private properties, but never the interests of cultivation. The works I observed at Gange, in Languedoc, for throwing the water of a mountain stream into a canal, and raising it by enormous wheels into aqueducts built on arches, being much more limited in extent, and even confined to single properties, might more reasonably be looked for in the moun-

* Des Canaux de Navigation. Folio. 1778. p. 175. 184.

tainous districts of England and Wales. Such would answer greatly, and therefore ought to be undertaken; for I hardly need observe, that watering in our northerly climate answers upon most soils, as well as it does in the S. of Europe. The difference in value between cultivation, watered or not watered, is not greater there and here, except on arid and absolutely barren lands, on which the difference arising from climate is certainly enormous. Under a hot sun and in a dry climate like that of Provence, sandy or stony tracks, such as La Crau, yield, comparatively speaking, nothing; but watered, they become clothed with the richest verdure, and yield the finest crops. In regarding, therefore, the latitude of a country as an index for ascertaining the degree of improvement effected by irrigation, theory would deceive us greatly. Water gives many other things besides humidity; it manures, consolidates, deepens the staple or surface mould, and guards against cold; effects as obvious in a northern as in a southern climate. If I hold up the example of the southern provinces for England to copy, the French will not contend that they do not want it in their northern districts. In travelling from Calais to the Pyrenees, I met with this practice first in La Marche, between La Ville au Brun and Bassie, having passed considerably more than half the kingdom; thence it holds, with little interruption, to the Pyrenees, and the whole district of those mountains from Perpignan, where the practice is in great perfection, as it is through the chief part of Roussillon; almost to Bayonne all is watered; but strange to say, it is unknown (at least I saw no traces of it) in that part of Gascoign near St. Vincents, Dax Tartas, and to Auch. Through all the N. of France, comprehending every thing N. of the Loire, I no where found it, excepting only a few traces imperfectly executed at Neufchatel, Bernay, and Falaise, in Normandy, and at Izoire, in the Beauvoisis, but to so inconsiderable an amount, that they do not merit attention in a general view of the kingdom. The Duc de Liancourt, always attentive to every thing that promises public utility, has made a noble experiment at Liancourt, to introduce this practice into the Clermontois, where it is so greatly wanted, that many considerable vales are hardly better than bogs, which, watered, would be the richest meadows; his first cutting was sixty-five tons on eight arpents. France owes much to the enlarged views of that active, patriotic, and enlightened citizen. Through Picardy, Flanders, Artois, Champagne, Lorraine, Alsace, Franche Comté, Bourgogne, and the Bourbonnois, I will not assert that the practice is unknown; I have noted something of it in Alsace; but generally speaking, it may be understood, that these provinces are not watered. In travelling much above a thousand miles through them, I saw nothing that merits a moment's attention upon this head; but I viewed and even examined many hundred streams, in various parts of them, affording numerous opportunities of irrigation, without being used for this purpose. It is at Riom, in Auvergne, before this practice is met with in effect. Hardly more, therefore,

than

than one-third of the kingdom can be said to understand this most obvious and important object, one of the first in the circle of rural œconomics. If academies and societies of agriculture are amenable to the judicature of common sense, what are we to think of their employing their time, attention, and revenues on drill-ploughs and horse-hoes—on tinctures from roots—and thread from nettles—while two-thirds of such a territory as that of France remain ignorant of irrigation?

C H A P. VII.

Meadows.

IN a country, the greater part of which is open, and much the greater part very ill cultivated, meadow must necessarily bear a price much beyond the proportion of other countries differently situated. I hardly know a surer proof of the backward state of a country, than that of meadows bearing an exorbitant price. When chalk hills become covered, as they ought to be, with sainfoin, the price of meadows sinks half. When the arable lands yield neither cabbage, turnip, nor potatoe for the winter nourishment of cattle, hay is the only dependence. When the value of clover is little known, meadow must be rated at too high a value. These simple instances shew at once the connection, and the cause. It follows, that the price and rental will vary, not according to the intrinsic value, but the circumstances of the arable districts in its neighbourhood. The price in France is every where considerable, and in some places exceedingly great; suggesting no flattering ideas of the general husbandry of the kingdom. The produce of hay is in some cases large, but, on the whole, does not answer the price; arising, doubtless, in some measure, from the lands being fed at seasons when food is scarce and valuable, and thereby lessening the quantity of hay.

In the general management of meadow ground, the first feature is irrigation, on which this is not the place to enlarge. It is sufficient to remark here, that hardly more than one-third of the meadows of the kingdom is so improved. Draining, smoothing the surface, by keeping it free from all mole and ant hills, rolling, weeding, &c. are performed very insufficiently, every where, except in watered districts: draining is almost universally neglected. Immense tracks, in all the provinces of the kingdom, and on almost all the principal rivers, are *commons*; consequently cursed with rights absolutely subversive of all ideas of good husbandry.

From the minutes I took of the useful plants most frequent in the meadows of France quite to the Pyrenees, it appears, that they are exactly the same as we find

find in the best meadows of Great Britain. The principal are, 1, *lathyrus pratensis*, which I take to be the first plant for meadows that is to be found in either of the kingdoms, and meriting an attention which it has been very far from receiving; 2, *achillæa millefolium*, an admirable plant, equally neglected with the former; 3, *trifolium pratense*, the common clover, a biennial plant, but found abundantly in most meadows; 4, *trifolium repens*, the white Dutch clover, not valued by some very good farmers; but its being found largely in the best meadows of Europe, should make such an idea very doubtful; 5, *plantago lanceolata*, rib grass; 6, *medicago lupulina*, trefoil, indigenous over the whole kingdom, as it is also in England; 7, *medicago arabica polymorpha*; 8, *lotus corniculata*; 9, *poterium sanguisorba*, burnet, excellent in situations and soils directly the reverse of each other; on barren sands for sheep-walk, and it is found largely in the finest meadows. To these we may add another plant, found amply in the richest meadows over the south of Europe, and indigenous in England on poor sands, the *chicorium intybus*, equal, perhaps superior to all the rest, except the *lathyrus pratensis*, the culture of which is difficult.

I say nothing of grasses, from the extreme uncertainty, as well as difficulty, of getting seed clean. If the nursery that affords it be kept without alternate tillage, many sorts bad, as well as good, are found in it; and for alternate tillage, in courses of crops, it must be discovered, that they improve and prepare for corn like clover, &c. Ray grass, in England, has been cultivated under that great deficiency for a peculiar purpose, the early spring feed of sheep. If the seed of the *festuca pratensis*, *poa trivialis*, the *poa pratensis*, the *alopecurus pratensis*, and a few others, could at all times be procured at a reasonable price, they ought to be objects of more attention.

When the plants are well known that fill the best meadows of a country, the most important knowledge is gained for forming new ones; such of these plants as yield seed so plentifully as to enable seedsmen to deal in them, should be sown, and never the chance-medley of hay chambers, a practice pretty well exploded in England, but in France such questions are novel.

C H A P. VIII.

Lucerne.

PICARDY—Boulogne.—LASTS twelve to sixteen years; three cuts, very fine and thick; fifteen pounds of seed per measure, about an acre; four or five horses kept for five months.

Breteuil.

Breteuil.—Value it more than corn; three cuts; in spots four feet high; lasts ten years; first cut for horses, the rest for cows.

ISLE OF FRANCE—*Arpajon.*—Much; three cuts.

ROUSSILLON—*Bellegarde.*—Watering shortens its duration; give it water every eight days, when there is no rain.

Perpignan.—Watered lucerne in all the bottoms.

Pia.—By far the richest crop, and most profitable culture; it is sown largely on two sorts of land, the dry stony poor soils that are watered, and also on the rich deep friable loam in the vale between Pia and the calcareous northern mountains, which are not watered; in all cases it is sown broadcast and without corn. It is cut, for the first time, the end of April; and, if watered every forty days afterwards, to the amount of five cuts in all; if the land be not watered it is cut thrice with a full product; and a fourth time with an inferior one. If watered it does not last above seven or eight years, but in other land twenty and even thirty years; the hay is preferred to all others; a minatre is worth 6 louis at four cuts (5l. 9s. 4d. per acre); I walked over many fields of it, and found the crops beautifully clean and luxuriant, of a complexion and product very different from what is ever seen in England, but not equal to that of Barcelona in height by a third. Perpignan to Villa Franca, take three crops of wheat after lucerne.

Sijeau.—Yields two cuttings in dry years, and four in wet ones; lasts ten years.

LANGUEDOC—*Caussan.*—Fine; under mulberries; from thirty-six festerées get an hundred septiers of seed; the festerée is sown with 100lb. of wheat; the price last year was 50 liv. the septier. Vale land under lucerne lets sometimes at 40 liv. to 72 liv. the festerée; corn land only 15 liv.

Pezenas.—Lucerne every where; lasts ten or twelve years; is excellent for every thing except sheep, for which animal it is too fattening.

Pinjan.—Sow 15 lb. the festerée; always alone; cut five times a year, and lasts fifteen years, yielding 1200lb. dry hay each cutting; and the seed of a festerée has yielded 100 liv.; the present price of the seed is 45 liv. the quintal, and of the forage 40s. When it is weedy they clean it by ploughing in the winter with a narrow pointed share, choosing frosty weather, which kills the weeds, but not the lucerne; an admirable practice, and apparently the origin of Rocque's harrowing, if it extend into Provence, his country. When it is worn out, their conduct is no less excellent: greatly as it improves the land, they do not venture to sow wheat, but barley and oats for hay, not corn, for two years in succession; a great deal of lucerne, pushing from the old roots, would considerably injure any corn, but add equally to the value of a crop of forage, as they call it; and the mowing early cuts off abundance of weeds; after these two crops they sow wheat, which proves very fine.

Lunel.—Much lucerne, but not fine, for the soil is inferior.

Carcaſſonne.—Cut it four to fix times, according to rain; laſts 10 to 14 years.

GASCOIGN—St. Vincents.—Cut in good years thrice, in bad ones twice; much over-run with couch.

Fleuran.—A few ſmall pieces uſed for foiling horſes.

Eſtafort.—Cut four times for foiling horſes, and it is the beſt food of all for them.

Landron.—See a ſmall piece of lucerne, but no other in the rich vale of the Garonne.

POITOU—Poitiers.—Laſts fifteen years; uſe it both for foiling and hay, which is better than that of ſainfoin.

TOURAIN—Chanteloup.—The Duc de Choifeul's cows always tied up the year round; in ſummer foiled on lucerne, which gave cream and butter of the very fineſt flavour.

Blois.—Pieces of it on a poor and almoſt blowing ſand; laſts five years; cut it thrice; and the produce more valuable than corn.

Orleans.—Laſts eight or nine years, and is cut thrice.

ISLE OF FRANCE—Petiviers.—Laſts twelve or fifteen years.

Melun.—Much here; laſts ten years; it is cut thrice, and the produce more valuable than wheat.

Yerſaint.—Cut thrice; the firſt yields 400 bottles of hay; the ſecond 200; the third 100; in all 700 (about 4 tons per acre), and the ſelling price 20 liv. the 100: or 140 the arpent. The fineſt of all their corn crops are thoſe which ſucceed it.

To Montgeron.—It is the beſt feature of their huſbandry. Sow 22lb. of ſeed per arpent, with oats. It laſts twelve years. The price, at preſent, 20 liv. the 100 bottles. When they break it up, they ſow oats, and then wheat, getting by far the fineſt crops they ever experience.

Liancourt.—Cultivated in conſiderable quantities. Sow 30lb. of ſeed per arpent, at the average price of 20 to 24ſ. the pound. Monſ. Prevot, a very intelligent and underſtanding farmer in the vale of Catnoir, has remarked a great difference between the ſeed of Provence, &c. which is commonly ſold in the north of France, and their own. The former rarely ſucceeds ſo well as their own, which he attributes to the great difference of the climate: with their own ſeed they never fail.—The general cuſtom is to ſow it with oats. It laſts, with tolerable management, ten or twelve years; but on a rich deep ſoil, on a dry bottom, it has been known to reach the duration of twenty years. To deſtroy the weeds which ariſe in it, they harrow it partially with iron toothed harrows, and manure it with rotten dung. It is always cut three times a-year, and ſometimes four; but that is not common: a very good arpent would let at 150 liv. a-year, which is more than any other production in the country. The fineſt of

all

all may give 1600 bottles of hay, each of 12lb. or 19,200lb. which is above seven tons the English acre. In general, the crop may be reckoned at 500 bottles, at two cuts on a mine, or 1000 the arpent, which is 12,000lb. or better than five tons per English acre. The price of it does not equal that of good common hay; nor is it reckoned so good for horses. At present it is not worth more than 20 liv. the 100 bottles: they save seed of the third growth, and reckon 200lb. per arpent a middling crop. Seeding does not destroy it: on good land it is just as good after; but sometimes on poor land it is injured. A vast object in the culture is the great improvement it works in the land; when they plough it up, they do not venture to have wheat, as the luxuriance would be such that the product would be all straw. They take two, three, four, and even five crops of oats in succession, which are prodigiously great; and when the oats decline, they sow wheat, and get a very fine crop!

Marenne.—Lasts twelve to fifteen years; cut thrice; when ploughed up, sow two crops of oats, and then wheat, all sure to be excellent.

Pontoise.—Near the town half the land is under it.

Brasseuse.—Commonly sown with oats that succeed wheat, and often upon one ploughing only; yet such is the happy texture of the soil, a fine friable sandy loam, that it succeeds tolerably well, and would, with better husbandry, yield an immense advantage; it lasts ten or twelve years, and longer when taken care of. They cut it thrice a year. It yields, at the two first cuttings, 300 or 400 bottles per arpent of hay fit for horses, and the third is for cows. Madame la Viscountess du Pont, sister of the Dukes de Liancourt, has possibly more lucerne than any other person in Europe. She has 250 arpents 80 of which were mowed this year. I saw the hay, and never met with better or sweeter, yet bottled from the field in the method universal in France. She was so good as to inform me, that no food for cows yielded finer butter; I tasted it, and none could be better flavoured.

Dammartin.—Much; lasts nine years; cut thrice, unless for seed, in which case, twice only. The first cutting yields 400 or 500 bottles; the second half as much. The Archbishop of Aix, who has an abbey in the neighbourhood, has taken great pains to spread the culture, and has occasioned near 800 arpents being sown.

Soissons.—Lasts eight or nine years; cut thrice; yields at the first 300 bottles of hay, of 12lb.; at the second 250; and at the third 100 per arpent, of 96 perch, of 22 feet, 46,464 feet (3 tons 3 cwt.).

ARTOIS—*Recouffe*.—They have some; cut thrice; lasts twelve to fifteen years, and reckoned excellent.

NORMANDY—*Coutances*.—In the way to Granville many patches, the first I had seen in Normandy, and they increase to pieces of some consequence; lasts twenty years, and is constantly cut thrice.

La Roche Guyon.—Much cultivated; the Duchefs d'Anville has fifty arpents, and a farmer in the neighbourhood forty-seven; and I saw some good pieces in going to Magny; it is cut thrice, but does not last more than six years; sow it with oats; when broken up, they take three crops of corn in succession; in the open fields every body turns into it the 1st of November.

ISLE OF FRANCE—*Nangis.*—Seed 20lb. an arpent de Paris, at 12 to 20*s.* the pound (26lb. the acre); sow it with barley or oats that follow wheat; lasts six years, if manured eight; a good arpent yields three hundred bottles the first cut (1 ton 14 cwt. per acre), two hundred the second (1 ton 3 cwt.), one hundred the third (11½ cwt.), each of 10lb. (in all 3 tons 8½ cwt.); some sown alone on a clean fallow in August, and this is by far the best; the hay 20 to 30 liv. the hundred bottles (2l. 3s. 8d. a ton); if let it is at 40 liv. (2l. 2s. per acre); when they break it up, two crops of oats, and then one of wheat, and all good.

Meaux.—When oats have two leaves, they harrow in the lucerne seed 20lb. per arpent (100 perch 22 feet) (17lb. per acre); the price per lb. 4 to 10*s.* usually 6*s.*; the first year it produces, the first cut, but one hundred bottles per arpent, afterwards four hundred (2 ton 2 cwt. per acre), some five hundred, each of 12 to 16lb.; the second cut two hundred (1 ton 1 cwt. per acre), the third one hundred (10½ cwt. per acre), in all 3 tons 13½ cwt.; the hay of the first cut is given to horses, the second to sheep, and the third to cows; it is never manured; but the soil is a deep rich loam, that is to be ranked among the finest in the world; couch is the greatest enemy to it; they never use it in foiling, but always for hay; for mowing, making, cocking, and carting, 10 liv. the arpent; all is bottled in the field. They are now (July 3,) mowing the first growth, but some has been cut some time; nothing, they say, improves land so much; all the good oats that Mr. Gibert shewed me, at Neufmoutier, were after lucerne; the difference between those, and the other crops after wheat, being that of yellow and green.

DAUPHINE—*L'Oriol.*—Prepare for it with the spade, at the expence of 12 liv. the septerée; dung well; lasts five years; after that time, if they would preserve it, they plough it across with a little plough, called a *binet*, to destroy the grass, and then it succeeds for two years more. When they break it up, they take five crops of wheat in succession. I expressed my amazement at this execrable management; and Monf. Faujas de St. Fond attested the truth of the fact. If wild oats come the third year, they sow oats or rye instead of wheat, on that account.

PROVENCE—*Avignon.*—Much; it is usually sown alone in March, 5lb. of seed per cymena of 21,600 feet (10lb. per acre); cut four, five, or six times, and lasts seven or eight years if much watered, ten or twelve if less; they then plough it, and find the amelioration so great, that they take five, six, seven, and even eight crops of wheat in succession! But, bad as such management may be,

it is not, however, to be classed with a similar rotation among us, for water works miracles; and the wheat harvest is so early, that it affords time for what they please. Lucerne suits light rich land best; the produce at every cutting twenty-five quintals (3 tons 3 cwt. per acre); but for this it must be dunged as well as watered, which must be done in winter, after the frosts are gone; if no dung fifteen quintals (1 ton 5 cwt. per acre); the price 40 to 50 *£*. the quintal, being 10 *£*. below meadow hay. They reckon the hay bad for horses, blowing them up too much, but excellent for all other animals; I saw some of it at Avignon so beautifully green, that I felt it to ascertain if it were really hay, and not, as my eyes told me, fresh cut; it is sometimes let, and rents from 20 to 60 liv. the eymena (60 liv. is 4*l*. 12*s*. 9*d*. per acre); at five cuttings the produce per acre in money is 2*l*. 13*s*. 2*d*.

Hyer.—I viewed a new plantation making by Monf. Battaile; the piece contained one and a half acre English, and he was working it at the following expence:—First digging, 96 liv.—Burning roots, weeds, clods, &c. 96 liv.—Dunging 120 liv.—Second digging, 96 liv.—Seed, 60 liv.—Total, 468 liv. or 13*l*. 13*s*. per acre. It was left quite smooth and fine to the depth of a foot, free from every sort of root weed, and laid in beds ready for watering, and now (September) sowing; next year he will cut it four times, afterwards five, and perhaps six; it will last fifteen years, and possibly twenty; could let it at 400 liv. a year (11*l*. 13*s*. 7*d*. per acre), and the produce gross 500 liv. (14*l*. 11*s*. 11*d*. per acre); and when broken up it will give great crops of wheat.

Observations.

The culture of the plant under our consideration, is one of the principal features of French husbandry. We have gone to the French school for the culture of it, yet it is ill managed, and with bad success in England, and has been so in every period; but in France, even in climates similar to our own, it is an object of almost uniform profit; and it must therefore be unfortunate indeed, if we do not extract something from the French practice deserving our attention and imitation. The first leading circumstance that demands our attention is the unvarying practice of sowing it broadcast. The lucerne in Spain, which is of a luxuriance we have no conception of, and the little I have seen in Italy, is all sown in the same way: a contrary practice, namely, that of drilling has very generally taken place in England; it has been repeatedly urged, that the humidity of our climate renders hoeing necessary to keep it free from the spontaneous grasses; and, if hoeing is necessary, drilling is certainly so. But this necessity is not found to take place in the north of France, the climate of which very nearly resembles our own. After some years, those grasses destroy it there

as well as here ; but the French think it much more profitable when that happens to plough it up, than to insure a longer possession by perpetual expence and attention.

A Frenchman from Provence (Rocque), introduced this broadcast culture of lucerne, about twenty-five years ago into England : I saw his crops, which were very fine, and equal to any in the north of France. Mr. Arbuthnot, of Mitcham, had it also in the same method on a large scale, and with considerable success ; other persons have succeeded equally well, whose experiments may be found in the registers of my agricultural tours through England ; the method, however, has not been generally pursued ; and the little lucerne to be found in England is chiefly in drills. It certainly deserves inquiry, whether this is not the reason of the cultivation at large not having made a greater progress with us *. The introduction of hoes and horse-hoes among crops that are cleared but once a year from the land, and with no necessity of mowing them close to the ground, appears to be much easier, and more practicable, than hoeing and horse-hoeing a meadow cut and cleared thrice in a year ; and which must of necessity be mown quite closely. The preceding minutes seem to allow the conclusion, that the drill is not necessary for this culture ; the broadcast succeeds well in every part of France, in proportion to the goodness of the soil and to management, like every other crop.

I wish not to make this a didactic work, or I could offer hints that might be of advantage possibly to the culture in England ; I should apprehend, that a turnip or cabbage fallow is the right preparation ; if the field be foul for two years in succession, fed on the land, sown with barley or oats, three-fourths the common quantity of seed, say two bushels ; should weeds appear the first year, I would bestow 10s. per acre in drawing, weeding, or otherwise extirpating them ; and after that the lucerne should take its chance. Explanations are endless ; a hint is sufficient for the practical husbandman, without prejudices : I would never manure till the crop was two years old.—Its ameliorating effect is a singular feature in the preceding notes ; the accounts are such as will surprize some persons ; but where husbandry is not very well understood, effects so remarkable must be estimated with caution ; and it may, without danger of deception, be admitted, that a material reason for this apparently exaggerated merit is, that fallows are the common preparation for wheat. If the French were well acquainted with the culture of clover as a preparation for wheat, nothing very marvellous would be found in lucerne. The intelligence at Pinjan

* So erroneous was it in a French writer, to mention this plant as one of the hinges of English agriculture, *Les Int. de la France Mal Entendus* v. i. p. 144. Another couples lupines and cedrangola with it, *Zanoni dell Agricolt.* tom. i. p. 118. but a native fell into the same error, *Patullo Ess. sur l'amélior. des Terres.*

indicates,

indicates, in this respect, a conduct that is truly excellent ; taking a tillage crop of fodder, winter tares for instance, on the first breaking up, is a practice that merits the greatest commendation.

CH A P. IX.

Sainfoin.

PICARDY—*Montreuil.*—**A** BEAUTIFUL piece 12 or 14 inches high, and as thick as possible, the 18th of May ; and a scattering to *Amiens.*

QUERCY—*Ponte de Rodez.*—Soil every where proper for it, but none sown.

Perges.—A small piece.

ROUSSILLON—*Sijeau.*—Sow it alone in March ; reap no crop the first year ; but the second, third, and fourth, it is good ; after that it fails, and they break it up for corn. Never cut it more than once.

LANGUEDOC—*Beziers.*—Esparcette sown with oats in March, lasts three years. The hay better than lucerne.

Pinjan.—Sow two septiers per festerée always alone ; the septierée holds 100lb. of wheat (between four and five bushels the Eng. acre) price of the hay 35*s.* the 100lb. (of lucerne 40*s.*) ; cut it but once a year, lasts five years. Does not improve land so much as lucerne ; sow wheat on it when broken up.

Beg de Rieux to Beziers.—Cultivated here.

Carcaſſonne.—Esparcette much cultivated ; sow it February, either on the wheat which is then high, or with barley or oats ; cut it but once a year ; lasts but three years. Sow wheat always after it, which are their greatest crops, and far better than after a fallow.

ANGOUMOIS—*La Graule to Rignac.*—Some sainfoin.

Rignac.—Much ; it lasts six or seven years ; sown in autumn with wheat, and not in the spring.

Barbessieux.—Every where in this chalky country ; lasts six years ; when they break it up, plough in July, and sow wheat ; it improves the land so much that they get great crops.

Maisons Blanches.—Lasts eight or nine years, plough it up for wheat ; seven years ago there was very little in this part of the Angoumois.

Vivonne.—Sainfoin land but little seen here.

TOURAINE—*Chateauroux to St. Maur.*—Sow forty boiseau of seed (at 24*s.* the boiseau at present), to the arpent of 100 chainée of 12 feet, 14,400 feet.

St. Maur.—Much of it, for other hay very scarce; generally sow it as soon as the seed is ripe, which is the middle of June. Their method of gathering the seed is by hand, arming their hands with gloves of leather or linen; they draw the branches through their hands, so as to strip off all the seed, which they put in their aprons; after which the crop is mown for hay, and though not so good, as if not seeded, is eaten by horses. They sow forty to fifty boiseau per arpent; but assert that it cannot be sown too thick; lasts five years, and produces generally 100 quintals of hay, at from forty to fifty*s.* the quintal; reckon the produce six or seven louis an arpent. Improves land so much, that they take two or three crops of wheat, considering five years sainfoin as five fallows.

Orleans to Petiviers.—Lasts four or five years. Pass some pieces sown alone in August. When they break it up sow wheat, and get great crops. Never feed it in the spring; but sometimes with sheep in January and February.

ISLE OF FRANCE—*Petiviers.*—Yields 4000lb. hay per arpent of 100 perch at twenty-two feet (1 ton 11 cwt. Eng. acre.).

La Chapelle La Reine.—Much; lasts three, four, and five years. Never feed it with sheep.

Liancourt.—Mown but once a year; lasts five or six years.

Beauvais.—Chalk-hills, they have some, and lucerne also.

Marenne.—Called Burgoine; lasts five or six years; mown once.

ARTOIS—*Bethune to Arras.*—Some.

Amiens to Poix.—Ought to be $\frac{2}{3}$ under this crop, but there is none.

NORMANDIE—*Caen.*—Sow it with the third crop of corn; lasts three to five years. With such execrable management they think it improves the ground so much, that when they break it up, they take two crops of wheat, one of barley, and one of oats in succession.

Falaise.—Not one acre where there ought to be fifty. They sow six boiseau of seed; lasts from three to five years. No wonder for some farmers do not sow it, except when their land is worn out with corn and full of weeds. But others manage better, and give it clean land. The produce is worth 120lb. an acre (2l. 12s. 6d. per Eng. acre.). The hay sells at 24lb. the hundred bottles of 12 to 14lb. (30s.) a ton at present (August 1788), 25.

Avranches to Pont Orfin.—Stoney soil, fit only for sainfoine, but none cultivated.

Alençon.—A little here.

Gracé.—Some good; lasts twelve or fifteen years, and has been known to twenty; sow it in September with rye.

La Roche Guyon.—Lasts only three or four years; sow it with oats, when broken up sown with corn three years in succession.

CHAMPAGNE—*Mareuil.*—On dry sandy land sow it in September on rye. Cut once, produce 400 bottles, at 10 to 12lb. (1 ton 14 cwt. Eng. acre); lasts six years; it is best the third. Sometimes a second cut produce only the half. The seed is always gathered by hand. When it is broken up vetches are sown, then wheat, and then oats; and the wheat is better than after a fallow.

Epernay.—All a chalky country. There is much; it lasts four or five years, then plough it for wheat and oats, and after that lay it down for sainfoin again.

La Petite Loge.—Some, but not one acre where there ought to be 100.

To Chalons.—None, yet the country ought to contain nothing else.

To Ove.—Not more than three or four small pieces in fifteen miles, yet they go five leagues for their hay, and are situated on a soil most applicable to this grass. The consequence of thousands of little farms, but no husbandry, only a miserable diversion of the soil from what it ought to produce, in order to raise rye bread to feed a wretched population.

LORRAINE—*St. Menehould to Verdun.*—Stonebrash, but no sainfoin.

To Marletour.—None, yet hills fit for nothing else.

ALSACE—*Befort to Isle.*—One single piece, yet the soil every where a red loam, eight or nine inches deep, on quarry.

AUVERGNE—*Clermont.*—On the dry lands they have it, and lasts four or five years. I found it indigenous on the rocky mountain Le Puit de Gravenoir, with the medicago falcata, both purple and yellow.

DAUPHINE—*L'Oriol.*—Sow it in March amongst wheat; feed it in winter with hogs; mow it in May; in September there is a full growth, which is ploughed in, and wheat sown. The price of the seed 4 liv. the septier, which holds 100 to 112lb. of wheat; that crop is great as if dunged for. This singular husbandry is common.

I saw Mr. Faujas de St. Fond's field of it young, among his wheat stubble, eight or nine inches high, and very thick, on a watered land, on which, as above described, he will sow wheat. The soil of this field is an admirable sandy-clay, five or six feet deep, on a level with the Rhone; and under it a bed of blue marl, with many shells in it.

If sainfoin is near mulberries for two or three years, it kills the tree, and even walnuts. The equisetum has the same effect, and sainfoin will kill even the equisetum.

To a person who considered them carelessly, these minutes would probably appear to be the register of some plant quite unknown in England, for it would be difficult to believe that sainfoin could be managed as it is actually in France. With

us this grafs lasts generally from twelve to fifteen years ; in France three, four, or five, and not often six years. I viewed much in many parts of that kingdom, and though it was not equal to our crops, yet I could not remark any appearance that seemed to shew a necessity of breaking it up so soon. This very extraordinary circumstance I attribute to the shortness of leases, to the bad arrangement of farms, and to the importance of cattle being scarcely any where understood. Leases are generally for nine years ; and a tenantry fixed in confidence upon estates is rarely found ; under these circumstances, one might naturally suppose, that a crop which lasts longer than the whole duration of the lease, and is known at the same time to prepare the land for corn, would not be cultivated at all ; as he who sowed would have no certainty of reaping the harvest. The conclusion appears natural ; but there is at the same time an objection to it which raises a difficulty. I found precisely the same culture and the same conviction of its propriety among gentlemen who farm their own lands, as well as amongst the tenantry around them. So far as it respects those who do not occupy their lands, by means of *metayers*, at half or third produce, the objection has some force ; but very little as to those whose practice is different. Under the proper head it is shewn, that no improvements or new practices can be introduced under the species of occupation above-mentioned, without too great a hazard or much injustice. But where a proprietor fairly occupies his land, without the intervention of a *metayer*, he can have no inducement of this nature to act absurdly. Either therefore the common practice influences the idea, and occasions an imitation, without inquiry or experiment, or there are other reasons for this conduct. When corn is the only capital object of a farmer, and through ignorance in his profession he thinks there is no better view than to sow as much as possible, regardless of every other circumstance, he may be supposed to be in haste to break up sainfoin before the proper time ; he is eager to get those three or four crops of wheat, which the barbarous practices of his country have permitted him to expect. And on similar principles, a farmer who has no just attention to cattle, and knows nothing of the art of making them productive of corn, by a well ordered arrangement of his fields, will feel no compunction at setting a plough to work in a sainfoin field, at the very moment it is coming to perfection. These remarks are chiefly applicable to crops that are apparently good ; and, from their appearance, promise to last much longer than the farmer has an inclination to permit them : but for others, which seem worn out or choaked with grafs and weeds, another observation is necessary. There is not in any part of France, where I have been, the least idea of making land perfectly clean and free from weeds, *as a preparation for grafs* ; whatever attention of this sort is any where met with, is all exerted in fallowing for wheat. Sainfoin is usually sown with a second or third crop of corn, and in some places the farmers

farmers do not think of this grass till their land is so full of weeds and so exhausted, that it will produce corn no longer. In such cases I do not so much wonder at sainfoin lasting only four or five years, as that it should be produced at all, or that enough of it would be found on the land to ascertain what the crop is. The different circumstances which may be supposed to occasion the management I speak of, it is not very material to discriminate. It is sufficient to remark, that there can hardly be produced, in the range of husbandry, a proof more decisive of that art being in its infancy in France. On poor, chalky, stony soils, very indifferently adapted to corn, to be eager to plough up sainfoin, before it is worn out, or to lay it down in such a slovenly manner, as to shorten its proper duration two-thirds, is a conduct that cannot be too severely condemned. I was repeatedly assured, that no management would make it last longer in France. To refute such assertions, by shewing their absurdity, would take up more room and time than such questions are worth. The French cannot at present understand how much every sort of the cultivated grasses depends on a judicious course of crops; nor do they comprehend how such plants depend as much on turnips (or on some other plant whose culture may answer the same end) as upon any preparation immediately to be given. Clean fallows in a kingdom, where agriculture is ill understood, will always be sown with bread corn; but if covered with plants that are not removed or consumed time enough for wheat or rye, and consequently barley or oats to be sown, the land may be laid down in good order, *provided the farmer will give up a second crop*. To those who sow these grasses with rye on fallow, this observation is not equally applicable; their common husbandry offers the same opportunity, if they will forbear the second and third corn crops. In some provinces, particularly in the Bourbonnois and Nevernois, on dry sound gravels, some of which are on a hard bottom, the course is, 1, fallow; 2, rye; and the country is not open. Here, one would think, grasses, and particularly sainfoin, might very easily be introduced, as the farmers would have a crop in lieu of a fallow the third year; but such is the perverseness of French agriculture, that no grasses are there cultivated. In many conversations I have had in France, on the subject of grasses, a favourite topic in that kingdom, I have always told them they must begin with turnips; the connection with which they could not understand. It is, however, a fact, that this culture no where thrives without the fallow being a crop that yields green winter food for cattle; such as turnips, cabbages, rape, potatoes, &c. &c. This is not the place for enlarging on such a point; in the chapter of courses of crops it is shewn, that the cultivation of grasses, without that of green winter crops, is but a poor system, and hardly worth attention. It appears from the notes, that sainfoin is no where well managed, or on the scale in which it ought to be found, but that it is cultivated through a great extent of country; in some provinces,

however, such as the vast one of Bretagne, and some others, I met with none. There is nothing in the notes so remarkable as the ameliorating quality in preparing for corn, universally attributed to it in every part of the kingdom.—Wherever the comparison is made, wheat is better after it than after fallow; yet sainfoin is sown without any attention to the cleanness of the land. This surely merits notice, and seems to prove strongly how futile a preparation the expensive one of a fallow is; and it ought to be received, as a lesson of the first consequence, not for the French only, but for ourselves and every other people, that a *lay* is a much better preparation for corn than a fallow: and farther, that there is no improvement of land apparently so cheap or so sure as a cessation of tillage by laying to grass. These conclusions arise from an uniform concurrence of facts observable throughout the kingdom. The general management of such crops in France is indeed too bad for Englishmen to learn from them; but there is no country, from which we may not glean something; nor any people, whose rules and experience, when properly combined with what we already possess, may not prove a valuable addition to the common stock of knowledge. It would be easy, and even pleasant, to enlarge on such topics—but I am registering the result of travels, and not composing dissertations on these subjects.

C H A P. X.

Of Inclosures in France.

THERE is scarcely a circumstance concerning this great kingdom, which ought to be so well known, and yet which is so grossly misrepresented, both in common books and common conversation, as the subject of this inquiry. The idle loungers, that write the guides and journies to Paris and Rome, would make their readers believe, that if you turn a horse loose at Calais, he may run to Bayonne for want of an inclosure to stop him. France is certainly much less inclosed than England; but the travellers who take the common route only from Calais to Paris, Dijon, Lyons, and Chambery, can have no more idea of the inclosures in that kingdom, than if they had staid at home in Portman or Grosvenor-squares. The principal districts of inclosure which I viewed are, all Bretagne, the western part of Normandy, with the northern part of the Seine.

Most

Most of Anjou and Maine, as far as near Allençon. To the S. of the Loire an immense range of country is inclosed; Bas Poitou, Touraine, Sologne, Berry, Limosin, the Bourbonnois, and much of the Nevernois; and from Mont Cenis in Burgundy, to St. Poncin in Auvergne, all is inclosed. There is some open country in the Angoumois, and the eastern part of Poitou, but more is inclosed. Quercy is partly so; but the whole district of the Pyrenees, from Perpignan to Bayonne, extending to Auch, and almost to Toulouse, is all (wastes excepted) thickly inclosed. This contiguous mass of country comprehends not less than 11,000 square leagues* of the 26,000 contained in the whole kingdom; and if to this we add the considerable districts in other parts of France which are inclosed, they will, beyond a doubt, raise the total to a full half of the kingdom. It is to be considered, that Provence, especially about Avignon, is not without inclosures; Dauphiné has more. The whole range of the mountainous district of Auvergne, Velay, Vivarais, and Cevenois, contains many: Franche Compté and Burgundy, especially the former, have large tracks inclosed: Lorraine has some; and Flanders has them throughout. Add to this, most of the vineyards, woods and forests, and meadows†, of the kingdom; and it will not be thought too large an allowance, to suppose one-half of it in this state. In such a calculation it would be absurd to pretend to accuracy; it is a guess, founded on actual observation, and innumerable notes taken on the spot. Some of the inclosed provinces are chequered by open fields; and every open province is chequered by tracks that are inclosed. Another remark, not unnecessary to make, for the use of such as may travel in future, is, that there are many lands in France really inclosed for most of the purposes of husbandry, though apparently open; that is, property is absolutely distinguished, though without the limit of a hedge or a ditch. The use which is made of inclosures in this great kingdom, is a subject of more importance. If they do not know what to do with them, they might as well not have them. That this is really the case, no person can doubt who travels there with attention; and a stronger proof cannot be adduced, than that the same price per arpent should be given for inclosed and open lands, provided both are arable. This fact I met with often, to my astonishment. It is the more singular, because there are many parts also of the same kingdom, where the small proprietors shew, by their practice, how well they understand the value of inclosing; no sooner acquiring the soil, than immediately securing it to themselves by hedges, or ditches, or both. Bearn is as striking an instance of this as any part of Europe can exhibit. There is not a district in England closer, thicker, or

* That is, equal to the contents of the following generalities, Rennes, Caen, Tours, Bourges, Poitiers, Limoges, Moulins, Rochelle, Auch and Pau, Montauban, and Bourdeaux.

† Not all; for many are common, and there are rights over others.

better inclosed; and, what is uncommon in France, gates and stiles are in good order. The whole territory of the Pyrenees is in general an inclosed country, but fences are not so neat, or so well preserved, as in Bearn. In Bretagne also, the whole of which is more or less inclosed, though ordinarily with a rough and savage aspect, yet there is a district from Guingamp to Belleisle much better, where the gates are ingeniously contrived to save iron; by means of the posts being stout, that on which the gate swings has a projection at top and at bottom, the latter being sufficient for the gate to turn *on*, and the former to turn *in*, for confining it to the perpendicular position; and the other post has a hole, slit, or gash, cut across the face of it, for lifting a projection of the head of the gate into, by which it is as securely fastened, as by means of irons in the gates of England—a contrivance that answers well where wood is not too dear.

It cannot be doubted, but that in these provinces, and in Limosin, Berry, and others, where I observed the hedges well kept, and gaps attentively mended, the farmers must be well persuaded, from experience, of the advantages of inclosing. They would not put themselves to a considerable expence, if they did not expect a reimbursement. But in the provinces where the open fields predominate, there inclosures are little valued: I do not well understand the reason for this;—if the husbandry varied in the inclosed fields, from that of the uninclosed one, there would be nothing surprising in it; but the marvellous folly is, that, in nine-tenths of all the inclosures of France, the system of management is precisely the same as in the open fields; that is to say, fallows as regularly prevail, and consequently the cattle and sheep of a farm are nothing in comparison of what they ought to be. Flanders and Alsacé, and in general the very rich soils, are well cultivated, but not every where; for the noble loams of Bernay to Elbœuf, and those of the Pays de Caux, are disgraced with fallows. Sologne is inclosed, yet it is the most miserable province in France, of the same rank with Bretagne itself. The Bourbonnois, and great part of the Nevernois, are inclosed; yet the course pursued is, 1, fallow; 2, rye; and, 1, fallow; 2, rye; 3, left to weeds and broom—and all these on soils, as Bretagne, Sologne, and the Bourbonnois, highly improveable, and capable of the best Norfolk husbandry. With such miserable systems, of what good are inclosures?—Hence we may draw this conclusion, that when we find half of France inclosed, we are not to suppose that kingdom in the state of improvement and cultivation, which this circumstance implies among us; on the contrary, it indicates no such thing; for some of the poorest, and most unimproved provinces, are precisely these which are inclosed; and, for what I know, there may be visionary theorists in that kingdom, who will, from this circumstance, argue against the practice of inclosing, since no absurdities are so gross as to want advocates.

The chief cause of new inclosure in France, that fell within my knowledge, is, that the communities of many parishes, in various parts of the kingdom, and
parti-

particularly in the territory of the Pyrenees, being proprietors of the wastes, sell them to any person that applies for the property; to him they give an absolute assignment, without reserving any rights of commonage or fuel; in consequence of which, the purchaser has the power of inclosure, of which he never fails making use. Hence such numerous improvements have been made in the mountainous provinces. On the other hand, in the waste plains of Bretagne, Anjou, Maine, and Guienne, the whole being in the hands of great lords or seigneurs, who will not sell, but only fief out these wastes, we see them remain in the same barren and desolate state in which they were five hundred years ago; nor is it a small impediment, in these cases, that the rights of commonage are claimed in many instances by communities, when the property is in the seigneurs; a claim that has no existence when the property is in the communities themselves.

The open arable fields of Picardy, Artois, part of Normandy, the Isle of France, Brie, and the Pays de Beauce, are cursed with all the mischievous circumstances known in similar cases in England, such as rights of common pasturage, commencing on given days, when under corn, and throughout the fallow year; as well as that miserable phantastical division of property which seems to have been contrived, for giving an occupier as much trouble and expence as possible in the culture of his scraps of fields. In England we have been making, for forty or fifty years past, a considerable progress in the allotment and inclosure of open fields; and through tythes, folly, obstinacy, prejudice, and heavy expences in parliament, operate powerfully in preventing great numbers of inclosures, yet we have enough to preserve the habit, mode, and system of doing the business; it goes on; and, from the progress of good sense and experience, we may hope to have the whole kingdom inclosed in another century. In France, on the contrary, they have not taken the first step; they have not devised a method of proceeding; they know not, nor have any idea of giving full powers to commissioners to go through the Herculean labour, as the French would esteem it, of making a fair division, without appeal. There was a royal edict for this purpose in 1764, or 1765, I think, which had a particular reference to Loraine; but, in passing through that province, I made enquiries into its effect, and found little or nothing had resulted from it. Nay, I was assured at Metz, Pont a Mousson, Nancy, and Luneville, that rights of common pasture were universal in the province, and that every thing was eaten which was sown contrary to the established routine. I asked, at Luneville, why they had not more lucerne? The answer was, the *droit de parcours* prevents it. But under the old government of France, no permission, or regulation of this sort, could be carried into execution, because there was in reality no legislature in France. I shall elsewhere shew this more distinctly: no law could be effectual, unless consented to *willingly* by the parliaments, and then vigorously executed by them; for, by means of the vicious constitution of their courts of justice, there was no execu-

tive government to carry the law into execution; so that if all parties were not fully united in executing, as well as enacting in any measure, nothing could ever be done—the King being really impotent in this respect, with all his despotism. Under the new government, which is establishing in France, I have great doubts whether any progress can ever be made in this great and leading step to all useful improvements in agriculture: as far as the present constitution can be understood, it is the will of *the people* that is to govern; and I know of no country where the people are not against inclosures. The Tiers Etat, and clergy of Mentz* expressly demand, that the edict of inclosure shall be revoked: that of Troyes, and Nismes, and Anjou, make the same request†; another, that the right of commonage in forests shall be granted to the neighbouring parishes‡.—The nobility of Cambray declare, that commons ought not to be broken up§. Nay, some of the *cabiers* go so far as to say, that the commons which have already been divided, ought to be thrown open again||. Hence we may judge what probability there can be, of any new and effective laws to promote and *enforce* such a measure.

To enter largely into the advantages of inclosures, in such a work as this, and at this time of day, would be superfluous**, it is sufficient to remark, that without a regular system of inclosures no cattle can be kept, except on the

* *Cahier de Tiers Etat de Metz*, p. 45. *Du Clergé*, p. 11. The very people, therefore, most pestered with commons are those who are the first to desire them. *Mem. sur la Culture du Chou Navet*, par M. de Mononcourt. 8vo. 1788. p. 7.

† *T. Etat Troyes*. Art. 118. *Nismes*, p. 27. *Anjou*, p. 49.

‡ *T. Etat Thimerais*. p. 44.

§ *Nob. Cambray*, p. 19. It is, however, but just to remark, that the division of commons is demanded by the nobility of Sens, p. 26; nobility of Provins, p. 24; nobility of St. Quintin, p. 12; the clergy of Bayonne, art. 51; the nobility of Lyons, p. 23. The Tier Etat of Contentin, MS.

|| *Clergé Saumur*, p. 9. *Troyes*, p. 10.

** The King of Prussia justly remarks, “Ce ne fut qu’après la séparation des communes que l’agriculture des Anglois commença à prospérer.” *Oeuvres*, tom. v. p. 151. See also, for vast advantages, *L’Ami des Hommes*, 5th edit. 1760. vol. v. p. 125. But, above all, let me quote the instances given by a French writer, which are so pointed as to merit much attention. “There are in the election of Chateau Thiery, 109 communities, among whom 32 possess commons, and 74 have none. In the 32, eleven have augmented in their fires 152; twenty others have diminished 375; and one has rested as it was; in the 77 without commons, 13 have augmented 147 fires; 42 diminished 473; and 22 remained as they were. The election of Soissons offers an example not less striking; 32 parishes possess near 4000 arpents of commons, which contained, in 1729, families 2470; but at present they are reduced to 1689. In 20 villages without commons, there are 90 fires more than in 20 other villages that have commons. With commons there is a cow to 13 $\frac{1}{5}$ arpents; without, one to 9 $\frac{1}{5}$ arpents.” *Traité des Communes*. 8vo. 1777. And it is very well observed by another, that commons and common fields are of much less use to those who want most, than to those who can do without them. *Memoire de la Soc. Oecon. de Berne*. 1762. tom. ii. p. 80.

Flemish system of constant confinement in stables, stalls, or yards; and this method, when the lands which are to yield the food are distant from the home-stall, is inconvenient and expensive, though in a great variety of respects truly admirable. With open field farms, much dispersed, it is impossible to follow the Flemish system; not only because the established rotation excludes the proper plants for cattle, but because, if they were raised, they could not be daily carted home, without committing trespasses on other people; therefore, it should always be remembered, that cattle and inclosure are synonymous terms. The numerous academies and societies of agriculture in France, that, by premiums and dissertations, attempted to increase the cattle of the kingdom, by the culture of new grasses and other plants, without making proper distinctions, and paying a peculiar attention to inclosed districts, could not, in the nature of things, see any good effects result from their endeavours: it was something like the Intendant's giving turnip seed to farmers who had not, perhaps, a single acre of land in circumstances that permitted the cultivation. But we may safely assert, that without inclosure the half of France cannot possibly support the requisite stock of cattle and sheep; and without such stock, a good and productive husbandry is utterly impracticable. On whatever agricultural subject we may be employed, it is never to be forgotten, nor can we recur too often to the position, that the fallows of a farm are to support the cattle and sheep of it.

The first great object of French agriculture is to establish a better husbandry in the parts of the kingdom already inclosed; and the second is to inclose the parts now open. It is remarkable that vineyards are generally open, though property is distinct and ascertained; I have met with instances where the divided and scattered scraps of land in this culture have been as various and as inconvenient as in common arable fields, probably from their having been in this state before they were converted into vineyards. Inclosures, however, are in no culture more important than in the vineyard. Trespasses are mischievous in proportion to the value of the product, and to the ease and temptation of committing them. The assiduity exerted, and the expence bestowed, in watching vineyards in many parts of France, are a convincing proof, that the better they are inclosed, the more valuable they would be considered. How far the shelter resulting from inclosures would preserve the vines from the inclemencies of unfavourable seasons, deserves the attention of French agriculturists. There is another light in which this improvement may be placed, which in France merits particular attention, namely, the necessity of making every where provision for fuel, by some application of the land to it, from the scarcity or badness of coal in seven-eighths of the kingdom. I have already shewn what an immense proportion of it is under woods and forests, for supplying fuel; whereas a well regulated inclosure, the hedges judiciously planted and preserved,

would yield, as they do in England, considerable quantities of fuel. Where shelter or humidity were wanted, this quantity would be large; where the fence simply was the object, it would be less, as such motives would regulate the height of the hedge.

CHAP. XI.

Of the Tenantry, and Size of Farms in France.

THERE are five circumstances in the occupation of land in France, under which I may include the very numerous notes I took in all the provinces, and which are too voluminous for insertion: 1, the small properties of the peasants; 2, hiring at a money rent, as in England; 3, feudal tenures; 4, monopolizing lands hired at money rent, and re-let to peasants; 5, *metayers*; by which is to be understood, hiring at half or third produce.

I. The small properties of the peasants are found every where, to a degree we have no idea of in England; they are found in every part of the kingdom, even in those provinces where other tenures prevail; but in Quercy, Languedoc, the whole district of the Pyrenees, Bearn, Gascoign, part of Guienne, Alsace, Flanders, and Loraine, they abound to a greater degree than common. In Flanders, Alsace, on the Garonne, and Bearn, I found many in comfortable circumstances, such as might rather be called small farmers than cottagers, and in Bas Bretagne, many are reputed rich, but in general they are poor and miserable, much arising from the minute division of their little farms among all the children. In Loraine, and the part of Champagne that joins it, they are quite wretched. I have, more than once, seen division carried to such excess, that a single fruit tree, standing in about ten perch of ground, has constituted a farm, and the local situation of a family decided by the possession.

II. Hiring at money rent is the general practice in Picardy, Artois, part of Flanders, Normandy (except the Pays de Caux), Isle of France, and Pays de Beauce; and I found some in Bearn and about Navarens. Such tenures are found also in most parts of France, scattered among those which are different and predominant; but, upon a moderate estimate, they have not yet made their way through more than a sixth or seventh of the kingdom.

III. Feudal tenures.—These are fiefs granted by the seigneurs of parishes, under a reservation of fines, quit rents, forfeitures, services, &c. I found them abounding most in Bretagne, Limosin, Berry, La Marche, &c. where they spread through whole provinces; but they are scattered very much in every part of

of the kingdom. About Verfon, Vatan, &c. in Berry, they complained fo heavily of thefe burthens, that the mode of levying and enforcing them muft conftitute much of the evil; they are every where much more burthensome than apparent, from the amount which I attribute to that circumftance. Legal adjudications, they affert, are very fevere againft the tenant, in favour of the feigneur.

IV. Monopoly.—This is commonly practifed in various of the provinces where *metaying* is known; men of fome fubftance hire great tracts of land, at a money rent, and re-let it in fmall divifions to metayers, who pay half the produce. I heard many complaints of it in La Marche, Berry, Poitou, and Angoumois, and it is met with in other provinces; it appears to flow from the difficulties inherent in the metaying fyftem, but is itfelf a mifchievous practice, well known in Ireland, where thefe middle men are almoft banifhed.

V. *Metayers*.—This is the tenure under which, perhaps, feven-eighths of the lands of France are held; it pervades almoft every part of Sologne, Berry, La Marche, Limofin, Anjou, Bourgogne, Bourbonnois, Nevernois, Auvergne, &c. and is found in Bretagne, Maine, Provence, and all the fouthern counties, &c. In Champagne there are many at *tier franc*, which is the third of the produce, but in general it is half. The landlord commonly finds half the cattle and half the feed; and the metayer labour, implements, and taxes; but in fome diftricts the landlord bears a fhare of thefe. In Berry fome are at half, fome one-third, fome one-fourth produce. In Rouffillon the landlord pays half the taxes; and in Guienne, from Auch to Fleuran, many landlords pay all. Near Aguilon, on the Garonne, the metayers furnifh half the cattle. Near Falaiſe, in Normandy, I found metayers, where they fhould leaft of all be looked for, on the farms which gentlemen keep in their own hands; the confequence there is, that every gentleman's farm muft be precifely the worft cultivated of all the neighbourhood:—this difgraceful circumftance needs no comment. At Nangis, in the Ile of France, I met with an agreement for the landlord to furnifh live ftock, implements, harnefs, and taxes; the metayer found labour and his own capitation tax:—the landlord repaired the houſe and gates; the metayer the windows:—the landlord provided feed the firft year; the metayer the laft; in the intervening years they fupply half and half. Produce fold for money divided. Butter and cheefe uſed in the metayer's family, to any amount, compounded for at 5s. a cow. In the Bourbonnois the landlord finds all forts of live ftock, yet the metayer fells, changes, and buys at his will; the ſteward keeping an account of thefe mutations, for the landlord has half the product of ſales, and pays half the purchaſes. The tenant carts the landlord's half of the corn to the barn of the chateau, and comes again to take the ſtraw; the confequences of this abſurd fyftem are ſtriking; land which in England would let at 10s. pay about 2s. 6d. for both land and live ftock.

At the first blush, the great disadvantage of the metaying system is to landlords; but, on a nearer examination, the tenants are found in the lowest state of poverty, and some of them in misery. At Vatan, in Berry, I was assured, that the metayers almost every year borrowed their bread of the landlord before the harvest came round, yet hardly worth borrowing, for it was made of rye and barley mixed; I tasted enough of it to pity sincerely the poor people; but no common person there eats wheaten bread; with all this misery among the farmers, the landlord's situation may be estimated by the rents he receives. At Salbris, in Sologne, for a sheep-walk that feeds 700 sheep, and 200 English acres of other land, paid the landlord, for his half, about 33l. sterling; the whole rent, for land and stock too, did not, therefore, amount to 1s. per head on the sheep! In Limosin, the metayers are considered as little better than menial servants, removeable at pleasure, and obliged to conform in all things to the will of the landlords; it is commonly computed that half the tenantry are deeply in debt to the proprietor, so that he is often obliged to turn them off with the loss of these debts, in order to save his land from running waste.

In all the modes of occupying land, the great evil is the smallness of farms. There are large ones in Picardy, the Isle of France, the Pays de Beauce, Artois, and Normandy; but, in the rest of the kingdom, such are not general. The division of the farms and population is so great, that the misery flowing from it is in many places extreme; the idleness of the people is seen the moment you enter a town on market-day; the swarms of people are incredible. At Lander-
visiau, in Bretagne, I saw a man who walked seven miles to bring two chickens, which would not sell for 24s. the couple, as he told me himself. At Avranches men attending each a horse, with a pannier load of sea ooze, not more than four bushels. Near Isenheim, in Alsace, a rich country, women, in the midst of harvest, where their labour is nearly as valuable as that of men, reaping grass by the road side to carry home to their cows.

OBSERVATIONS.

Three material questions obviously arise; 1st, the inconveniencies of metaying, and the advantages of the tenure at a money rent; 2d, the size of farms; 3d, how far small properties are beneficial.

I. *Metayers.*

This subject may be easily dispatched; for there is not one word to be said in favour of the practice, and a thousand arguments that might be used against it. The hard plea of necessity can alone be urged in its favour; the poverty of the farmers being so great, that the landlord must stock the farm, or it could not be stocked at all: this is a most cruel burthen to a proprietor, who is thus obliged

to run much of the hazard of farming in the most dangerous of all methods, that of trusting his property absolutely in the hands of people who are generally ignorant, many careless, and some undoubtedly wicked. Among some gentlemen I personally knew, I was acquainted with one at Bagnere de Luchon, who was obliged to sell his estate, because he was unable to restock it, the sheep having all died of epidemical distempers; proceeding, doubtless, from the execrable methods of the metayers cramming them into stables as hot as stoves, on reeking dunghills; and then in the common custom of the kingdom, shutting every hole and crack that could let in air.—In this most miserable of all the modes of letting land, after running the hazard of such losses, fatal in many instances, the defrauded landlord receives a contemptible rent;—the farmer is in the lowest state of poverty;—the land is miserably cultivated; and the nation suffers as severely as the parties themselves. It is a curious question how this practice came to be exploded in Picardy, Normandy, and the Isle of France. The wealth of great cities will effect something, but not much; for Bourdeaux, Marseilles, and, above all, Lyons and Nantes, have done nothing in this respect; yet they are to be classed among the richest cities in Europe, and far beyond Rouen, Abbeville, Amiens, &c.—And were we to ascribe it to the nearer vicinity of the capital, why has not the same cause established a good husbandry, as well as rents paid in money?—The fact, however, is certain, that those three provinces, with Artois and Flanders, in which we should not be surprized at any variation, as they were conquered from a free country, comparatively speaking, are the only ones in the kingdom where this beneficial practice *generally* prevails. It is found, indeed, in a scattered and irregular manner elsewhere, but not established as in those provinces. That the poverty of the tenantry, which has given rise to this mischievous practice, has arisen from the principles of an arbitrary government, cannot be doubted. Heavy taxes on the farmers, from which the nobility and clergy are exempt; and those taxes levied arbitrarily, at the will of the intendant and his sub-delegues, have been sufficient to impoverish the lower classes. One would naturally have supposed, from the gross abuses and cruelty of this method of taxation, that the object in view were as much to keep the people poor, as to make the King rich. As the *taille* was professedly levied in proportion to every one's substance, it had the mischievous effect of all *equal* land taxes, when levied even with honesty; for a farmer's profit—his success—his merit, was taxed exactly in proportion to the quantum; a sure method of putting a period to the existence of either profit, success, or merit. The farmers are really poor, or apparently poor, since a rich man will affect poverty to escape the arbitrary rise of a tax, which professes to be in proportion to his power of bearing it: hence poor cattle, poor implements, and poor dung-hills, even on the farms of men who could afford the best.

What

What a ruinous and detestable system, and how surely calculated to stop the current of the wealth of the sovereign, as well as of his people!—What man of common sense and feeling, can lament the fall of a government that conducted itself on such principles? And who can justly condemn the people for their violence, in wresting from the nobility and clergy those privileges and distinctions, which they had used so unworthily, to the depression and ruin of all the inferior classes? * These taxes, united with the burthensome and odious feudal rights and impositions of the seigneurs, prevented all investment of capital, which could not be removed at pleasure, from the land: the evil was not so much a general want of capital in the kingdom, as an apprehension of fixing it on land, where it would of necessity be exposed to the rapin of regal and noble harpies; that this was the fact, we find from the case of the rich grazing districts of Normandy, where no want of capital was heard of, yet such lands demand a larger sum to stock than any other; a sum equal to the amplest improvement of the poorest and most difficult soils. Why then should not a proper stock be found on arable as well as on pasture lands? For an obvious reason;—the capital invested in fat oxen and sheep is removeable at a moment's warning; and, being every year renewed, the grazier has an annual opportunity of withdrawing from business; he has consequently a sort of independence, utterly unknown to an arable farmer, who has the least idea of improving his land, or of keeping a proper stock of implements and manure. The knowledge of this circumstance keeps the tyrants in order, and makes them tender in impositions, which being evaded, would leave the most valuable land in the kingdom without the means of being rendered productive. In regard to the best means of remedying the evils of metaying, they certainly consist in the proprietor's farming his own lands till improved, and then letting them at a money rent, without the stock, if he can find farmers to hire; but if not, lending the stock at interest. Thus favoured, the farmers would, under a good government and eased of tythes, presently grow rich, and, in all probability, would, for the most part, free themselves from the debt in twenty-five or thirty years; and, with good husbandry, even in a single lease of twenty-one years; but with their present wretched systems of cropping, and deficiency of cattle and sheep, they would be a century effecting it. If a landlord could not, or would not, farm himself, the next method would be, to let live stock and land at a money rent, for twenty-one years, the tenant, at the expiration, paying him in money the original value of the live stock, and subject to all

* The passage is left as originally written; the people have since shewn in their turn, that the little finger of a democracy is heavier than the whole body of an arbitrary monarch.

hazards and losses. There can be no doubt but such a system, with a good mode of taxation and freedom from tythes, would enable the metayer in that term to become at least capable of carrying on his business, without any assistance in future from his landlord.

II. *Size of Farms.*

I have treated at large of this subject in my *Tours through England*, and in the *Annals of Agriculture*, vol. vii. p. 510; at present therefore, I shall briefly touch upon some circumstances more particularly arising from the husbandry of France. I shall begin by asserting, with confidence, that I never saw a single instance of good husbandry on a small farm, except on soils of the greatest fertility. Flanders is always an exception; on that rich, deep, and putrid soil, in the exuberant plain of Alsace, and in the deep and fertile borders of the Garonne, the land is so good, that it must be perversity alone that can contrive very bad husbandry; but on all inferior soils, that is to say, through nine-tenths of the kingdom, and in some instances even on very rich land, as, for instance, in Normandy, the husbandry is execrable. I may further observe, that whenever bad management is found in those rich and well cultivated districts, it is sure to be found on small farms. When, therefore, I observed in many *cabiers* of the three orders, a demand to limit the size of farms, and great panegyrics on small ones, I could not but conclude, that the townsmen who drew up those instructions knew nothing of the practice of agriculture, except the vulgar errors which float in every country upon that subject*. This inquiry is of so much importance to every nation, that it ought to depend as much as possible on facts, and of course to be handled by those only who practise agriculture as well as understand it. The following question naturally arise. Is it the gross produce of husbandry that should chiefly be considered? Or the greatest produce that can be carried to market? Or is it the net profit? Should the populousness arising from cultivation be the guide? Or should the ease and happiness of the cultivators be only had in view? These questions might be multiplied, but they are sufficient for unfolding the inquiry. It will probably be found, that no one point is singly to be attended to, but an aggregate of all, in due proportions.

I. The gross produce cannot be alone considered, for this simple reason, that so many hands may be employed to raise the largest, as to afford none for

* *Cabier de Dourdon*, p. 17.—*Crepy*, p. 5.—*Estampes*, p. 27.—*Paris*, p. 41.—*Provins and Montereaux*, p. 51.

market; in which case there could be no towns, no manufacturers, but merely domestic ones; no army, no navy, no shipping. Such an arrangement, though perfectly consistent with the Count de Mirabeau's system, of an equal dispersion of a people over their whole territory, is yet so truly visionary, that it does not demand a moment's attention.

II. The net profit of husbandry cannot possibly be the guide, because the most uncultivated spots may be attended with a greater net profit on the capital employed, than the richest gardens; as a mere warren, sheep-walk, &c.

III. Populousness cannot be a safe guide in the inquiry, because if it be alone attended to, it infallibly destroys itself by excess of misery. There can be no merit in any system that breeds people to starve; food and employment (towns) must, therefore, be in view as well as people.

IV. The ease and happiness of cultivators alone cannot be our guide, because they may be easier and happier in the midst of a howling desert, than in the gardens of Montreuil.

V. I am not absolutely satisfied with the *greatest produce that can be carried to market*, but it comes infinitely nearer to the truth than any of the rest; it includes a considerable gross produce; it implies a great net profit; and indicates, exactly in proportion to its amount, that populousness which is found in towns, and that which ought to depend on manufactures; it secures the ease of the cultivating classes; it enables the farmer to employ much labour, and, what is of more consequence, to pay it well.

This leading proposition, being thus far satisfactorily ascertained, on comparison with the others, we are able to determine that that size of farms is most beneficial, in general, which secures the greatest produce *in the market*; or, in other words, converted into money. Now, in order thus to command a great surplus, above what is consumed by men and their families employed or depending on the cultivation, every species of good husbandry must be exerted. Lands already in culture must be kept improving; great stocks of cattle and sheep supported; every sort of manure that can be procured used plentifully, draining, irrigating, folding, hoeing, marling, claying, liming, inclosing, all must be exerted with activity and vigour:—no scrap of waste land left in a neglected state:—all improved; all pushing forward towards perfection; and the farmer encouraged, by the profit of his undertakings, to invest his savings in fresh exertions, that he may receive that compound interest so practicable for the good farmer. The sized farm that best effects all these works, will certainly carry to market the greatest surplus produce. I have attended, with great care and impartiality, to the result of this inquiry throughout the kingdom; and though in
many

many provinces the husbandry is so infamously bad, as to yield a choice only of evils, yet I may safely assert, that on farms of 300 to 600 acres it is infinitely better than on little ones, and supplies the market with a produce beyond all comparison superior. But by farms I mean always *occupations*, and by no means such as are hired by middle men to re-let to little metayers. There is nothing strange in the bad husbandry so common on little farms; by which I mean such as are under 100 arpents, and even from 100 to 200; those proportions between the stock and labour, and the land, by which practical men will understand what I mean, are on such farms unfavourable. The man is poor, and no poor farmer can make those exertions that are demanded for good husbandry*; and his poverty is necessarily in proportion to the smallness of his farm. The profit of a large farm supports the farmer and his family, and leaves a surplus which may be laid out in improvements; that of a small tract of land will do no more than support the farmer, and leaves nothing for improvements. With the latter the horses are more numerous than with the former, and in a proportion that abridges much of the profit. The division of labour, which in every pursuit of industry gives skill and dispatch, cannot indeed take place on the greatest farms in the degree in which it is found in manufactures; but upon small farms it does not take place at all:—the same man, by turns, applies to every work of the farm; upon the larger occupation there are ploughmen, threshers, hedgers, shepherds, cow-herds, ox-herds, hog-herds, lime-burners, drainers, and irrigators:—this circumstance is of considerable importance, and decides that every work will be better performed on a large than on a small farm; one of the greatest engines of good husbandry, a sheepfold, is either to be found on a large farm only, or at an expence of labour which *destroys the profit*. It has often been urged, that small farms are greater nurseries of population; in many instances this is the case, and they are often pernicious exactly in that proportion; prolific in misery; and breeding mouths without yielding a produce to feed them. In France, population, outstripping the demand, is a public nuisance, and ought to be carefully discouraged; but of this fact, glaring through the whole kingdom, more in another chapter. The farms I should prefer in France would be 250 to 350 acres upon rich soils; and 400 to 600 upon poorer ones.

England has made, upon the whole, a much greater progress in agriculture than any other country in Europe; and great farms have absolutely done the whole: infomuch, that we have not a capital improvement that is ever found on

* "Wealth," says a French writer, "in the hands of farmers becomes fatal to agriculture." *Essai sur l'état de la culture Belgique*. 8vo. 1784. p. 7. Who can wonder at a kingdom being ill cultivated, that abounds with such politicians?

a small one. Let foreigners—let the Count de Hertzberg* come to England and view our husbandry:—let me have the honour of shewing him that of our large farms, and then let Dr. Price conduct him to that of our small ones: when he has viewed both, he will find no difficulty in drawing conclusions very different from those which he has hitherto patronized. We have in England brought to perfection the management of inclosing, marling, claying, and every species of manuring. We have made great advances in irrigation; and should, perhaps, have equalled Lombardy, if the liberty of the people would have allowed as ready a trespass on private property. We have carried the breeding of cattle and sheep to a greater perfection, than any country in the world ever yet experienced. We have, in our best managed districts, banished fallows: and, what is the great glory of our island, the best husbandry is found on our poorest soils. Let me demand, of the advocates for small farms, where the little farmer is to be found who will cover his whole farm with marl, at the rate of 100 to 150 tons per acre? who will drain all his land at the expence of two or three pounds an acre? who will pay a heavy price for the manure of towns, and convey it thirty miles by land carriage? who will float his meadows at the expence of 5l. per acre? who, to improve the breed of his sheep, will give 1000 guineas for the *use* of a single ram for a single season? who will give 25 guineas per cow for being covered by a fine bull? who will send across the kingdom to distant provinces for new implements, and for men to use them? who employ and pay men for residing in provinces, where practices are found which they want to introduce on their farms?—At the very mention of such exertions, common in England, what mind can be so perversely framed as to imagine, for a single moment, that *SUCH THINGS* are to be effected by *little farmers*?—Deduct from agriculture all the practices that have made it flourishing in this island, and you have precisely the management of small farms.

* That Minister says, in one of his discourses to the Academy of Berlin, “Ce le principe de que le cultivateur Anglois Young fontient, dans son Arithmetique Politique, sur l'utilité des grandes fermes. M. Young paroît avoir tort à l'égard d'un gouvernement republicain tel que celui de la Grande Bretagne, que a plus besoin qu'un autre d'une grande population.” Here, as in many instances, it is supposed, that large farms are unfavourable to population, because their produce is consumed in towns. Has the count given any reason to make us believe, that the produce of a large farm consumed in a town, does not imply a population proportioned to its quantity, as well as the produce of a small farm, which is consumed by the people that raise it? As population is in proportion to food, those who urge that great farms are injurious, should shew that small ones raise a greater quantity; that is, are better cultivated: surely the assertion implies too gross an absurdity to be ventured. Frederic, who attained the title of Great, on account of his superior skill in the arts of slaughtering men, was, on military principles, a friend to breeding them.—“considerant que le nombre des habitants fait la richesse des souverains on trouva——” &c. *Oeuvres de Fred. II.* Tom. v. p. 146.

The false ideas, at present so common in France, are the more surprising, as no language abounds with juster sentiments on many of these questions of political œconomy than the French. There cannot be juster, truer, or more apposite remarks on the advantage of great farms and rich farmers, than in the *Encyclopædie* *. Nor can any one write better on the subject than M. Delegorgue †. Artois, he observes, was universally under two crops and a fallow; but changed to a crop every year, by the old customs being abolished. So beneficial an alteration, not common in France, was founded many and expensive experiments, which could be established only by means of the manures gained from large flocks and herds. By whom was this change effected?—by little farmers, who can hardly effect their own support?—assuredly not. He further observes, that some parts of Artois are divided for the sake of a higher rent, and cattle are there sensibly decreased; also, that a country labourer is much happier than a little farmer. And I give him no slight credit for his observation, that little farmers are not able to keep their corn; and that all monopolies are in consequence of them; implying, that great farmers keeping back their corn is beneficial; but monopolies are equally beneficial; and tend as advantageously to remedy the evils that flow from little farmers being in too great a hurry to sell.

But however clearly I may be convinced of the infinite superiority of large farms, and that no country can ever be highly improved, by means of small ones, yet I am very far from recommending any laws or regulations to enforce the union of several. I contend for nothing but freedom; and for the rejection of those absurd and preposterous demands, in some of the French *cabiers*, for laws *against* such an union. And let me add, that little attention should be paid to those writers and politicians, who, under despotic governments, are so strenuous for a great population, as to be blind to much superior objects; who see nothing in the propagation of mankind but the means of increasing soldiers; who admire small farms as the nurseries of slaves—and think it a worthy object of policy to breed men to misery, that they may be enlisted, or starve. Such sentiments may be congenial with the keen atmosphere of German despotism; but that they should find their way into a nation, whose prospects are cheered by the brighter beams of new-born liberty, is a contradiction to that general felicity which ought to flow from freedom. Much too populous to be happy, France should seek the means of feeding the numbers which she hath, instead of breeding more to share a too scanty pittance.

III. *Small Properties.*

In the preceding observations, I have had rented farms only in view; but there is another sort which abounds in almost every part of France, of which we

* Tom. 7, p. 821. Folio.

† Mem. sur cette question: Est-il utile en Artois de Diviser les Fermes? 1786. p. 7.

cannot form an idea from what we see in England—I mean small properties; that is, little farms, belonging to those who cultivate them. The number is so great, that I am inclined to suppose more than one-third of the kingdom occupied by them. Before I travelled, I conceived, that small farms, in property, were very susceptible of good cultivation; and that the occupier of such, having no rent to pay, might be sufficiently at his ease to work improvements, and carry on a vigorous husbandry; but what I have seen in France, has greatly lessened my good opinion of them. In Flanders, I saw excellent husbandry on properties of 30 to 100 acres; but we seldom find here such small patches of property as are common in other provinces. In Alsace, and on the Garonne, that is, on soils of such exuberant fertility as to demand no exertions, some small properties also are well cultivated. In Bearn, I passed through a region of little farmers, whose appearance, neatness, ease, and happiness, charmed me; it was what property alone could, on a small scale, effect; but these were by no means contemptibly small; they are, as I judged by the distance from house to house, from 40 to 80 acres. Except these, and a very few other instances, I saw nothing respectable on small properties, except a most unremitting industry. Indeed, it is necessary to impress on the reader's mind, that though the husbandry I met with, in a great variety of instances on little properties, was as bad as can well be conceived, yet the industry of the possessors was so conspicuous, and so meritorious, that no commendations would be too great for it. It was sufficient to prove, that property in land is, of all others, the most active instigator to severe and incessant labour. And this truth is of such force and extent, that I know no way so sure of carrying tillage to a mountain-top, as by permitting the adjoining villagers to acquire it in property; in fact, we see that, in the mountains of Languedoc, &c. they have conveyed earth in baskets, on their backs, to form a soil where nature had denied it. Another circumstance attending small properties, is the increase of population; but what may be advantageous to other countries, may be a misfortune to France.

Having, in this manner, admitted the merit of such small farms in property, I shall, in the next place, state the inconveniences I have observed to result from them in France.

The first and greatest, is the division which universally takes place after the death of the proprietor, commonly amongst all the children, but in some districts amongst the sons only. Forty or fifty acres in property are not incapable of good husbandry; but when divided, twenty acres *must* be ill cultivated; again divided, they become farms of ten acres, of five, of two, and even one; and I have seen some of half, and even a quarter of a rood, with a family as much attached to it, as if it were an hundred acres. The population flowing from

this

this division is, in some cases, great, but it is the multiplication of wretchedness. Couples marry and procreate on the *idea*, not the *reality*, of a maintenance; they increase beyond the demand of towns and manufactures; and the consequence is, distress, and numbers dying of diseases, arising from insufficient nourishment. Hence, therefore, small properties, much divided, prove the greatest source of misery that can be conceived; and this has operated to such an extent and degree in France, that a law undoubtedly ought to be passed, to render all division, below a certain number of arpents, illegal. But what are we, in this view of the subject, drawn from actual and multiplied observations, to think of the men who contend, that the property of land cannot be too much divided? That a country is flourishing in proportion to the equal dispersion of the people over their territory, is the opinion of one celebrated leader * in the National Assembly; but his father was of different sentiments; with great good sense and deep reflection he declares, that that culture does not most favour population which employs most hand †; “c’est à bien des égards un préjugé de croire, que plus la culture occupe d’hommes plus elle est favorable à la population;” meaning, that the surplus of product carried to market is as favourable to population, by feeding towns, as if eaten on the fields that produced it, *ainsi plus l’industrie & la richesse des entrepreneurs de la culture épargne de travail d’hommes, plus la culture fournit à la subsistance d’autres hommes*. Another deputy, high in general estimation, and at the head of the committee of finances, asserts, that the greatest possible division of land property is the best. Such gentlemen,

* *De la Monarchie Prussienne*, tom. iv. p. 13. The Count de Mirabeau, in this passage agrees, that great farms, upon a given space of land, will yield the greatest possible production, at the least possible expence; but contends, that there is a multitude of little objects, which escape the great farmer, of much more consequence than saving expences. It is incredible that a man of such decided talents should so utterly mistake the facts that govern a question, to which he has given much attention, at least if we are to judge by his recurring to it so often. Where does he find the fact upon which he builds all his reasoning, that little farmers make larger investments and expences than great farmers? I will not appeal to England, in which the question is determined as soon as named; but I should wish to be informed, in what provinces of France the little farmers have their lands as well stocked as great ones? or as well cultivated? M. de Mirabeau completely begs the question, in supposing what is directly contrary to fact, since the advances of the great farms are more considerable, perhaps the double of those of the little one; I am sure it is so in every part of the kingdom in which I have been. But the Count goes on to state how superior the little farms are, because so many more families are found on the land, which is precisely the most powerful argument against them, as that merit admitted, implies at once the annihilation of towns and manufactures being beneficial to a modern state, provided the people be found in the country; a position I have sufficiently answered in the text.

† *L’Ami des Hommes*, 5th edit. 1760. tom. v. p. 43. See also tom. vi. p. 79. *Tableau Oeconomique*. See the same subject, handled with much ability, by one of the greatest political geniuses of the present age, *De L’Oeconomie Politique*, par Monsr. Herrenschiwand. 8v. 1786. p. 275. And *Discours sur la division des Terres*. 8vo. 1786. Par le meme.

with

with the best intentions, spread opinions, which, if fully embraced, would make all France a scene of beggary and wretchedness. Amidst a mass of most useful knowledge, of deep and just reflections, and true political principles, a tendency to similar ideas is found in the reports of the committee of *Mendecité* *, in which the multiplication of little properties is considered as a resource against misery. Nothing more is necessary, than to extend such ideas, by supposition to fact, to shew their real tendency. There are 130 millions of acres, and at least 25 millions of people in France. Assign, therefore, to each person, its share of that extent: call it (allowing for rocks, rivers, roads, &c.) five acres each, or 25 acres per family. When, by the first principles of the idea, which is that of encouraging population, the luxury, celibacy, unhealthy employments, prostitution and sterility of cities are removed, and the plain manners of the country are universally established, every circumstance in nature carries the people to marriage and procreation: a great increase takes place; and the 25 acres gradually, by division, become 20, 15, 12, 8, and so on, perpetually lessening. What, on such a supposition, is to become of the superfluity of people?—You presently arrive at the limit beyond which the earth, cultivate it as you please, will feed no more mouths; yet those simple manners, which instigate to marriage, still continue:—what then is the consequence, but the most dreadful misery imaginable!—You soon would exceed the populousness of China, where the putrid carcases of dogs, cats, rats, and every species of filth and vermin, are sought with avidity, to sustain the life of wretches who were born only to be starved. Such are the infallible effects of carrying into execution a too minute division of landed property. No country upon earth is cursed with so bad a government as that would be, which aimed seriously at such a division; so ruinous is that population, which arises from principles pure and virtuous in their origin, but leads directly to the extremes of human misery!—Great cities have been called the graves of the human species: if they conduct easily to the grave, they become the best *euthanasia* of too much populousness. They are more apt to prevent increase than to destroy, which is precisely the effect wanted in such a country as France, where the division of property has unhappily nursed up a population, which she cannot feed; what, therefore, would be the misery of cities and towns supported their numbers, and left the whole surplus of the country regorging in the cottages?—This is too much the case for the happiness of the kingdom, as we see in a thousand circumstances, and particularly in the distress arising from the least failure in the crops; such a deficiency, as in England passes almost without notice, in France is attended with dreadful calamities.

* *Premier Rapport*. 8vo. 1790. p. 6. *Quatrieme Rapport*, p. 9. These reports were made by the chairman, M. de la Rochefoucauld Liancourt, and do very great honour to his abilities and his industry.

There cannot be a more pleasing spectacle, or better framed to call into animation the sympathies of our nature, than that of a family living on a little property, which their industry cultivates, and perhaps created: it is this object, so touching to the best feelings of the human bosom, that has certainly made many writers indiscriminate advocates for small properties. If the industry of towns and manufactures were active enough to demand the surplus of all this population as fast as it arose, the advantages of the system would be clear; but France knows, by sad experience, that such a surplus is not demanded at present; what, therefore, would the consequence be of bringing a fresh one to market, while the old one remains on hand? It is idle to cite the example of America, where an immensity of fertile land lies open to every one who will accept it; and where population is valuable to an unexampled degree, as we see in the price of their labour; but what comparison, between such a country and France, where the competition for employment is so great, arising from too great a populousness, that the price of labour is 76 per cent. below that of its more flourishing neighbour?—But, in considering this interesting subject, I shall recur, as I have done on so many other occasions, to the example of England. In this kingdom, small properties are exceedingly rare; in great numbers of our counties, there are scarcely any such thing to be found: our labouring poor are justly emulous of being the proprietors of their cottages, and of that scrap of land, a few perches, which form the garden; but they seldom think of buying land enough to employ themselves; and, as in France, of offering prices so much beyond the value, as to ensure the acquisition; a man that has two or three hundred pounds with us, does not buy a little field, but stocks a farm: now, as our labouring poor are incomparably more at their ease, and in every respect happier than those of France, does it not appear to follow, by fair conclusion, that small properties are by no means necessary for the welfare of the lower classes in the country? in every part of England, in which I have been, there is no comparison between the ease of a day-labourer and of a very little farmer; we have no people that work so hard, and fare so ill, as the latter. Why then should this minute division be considered as so advantageous in France, while we in England feel the benefit of a system directly contrary? There are several reasons for this; the manufactures of France, compared with those of England, are not nearly so considerable respectively, in proportion to the population of the two kingdoms. Nor does the agriculture of France, which is carried on either by farmers or metayers, afford any employment comparable to that which English culture yields. Country gentlemen, in France, do not employ probably the hundredth part of the labourers that are employed by country gentlemen in England, who have always some works of ornamental gardening or farming going on, which gives bread to many people. An object, more im-
portant,

portant, is, that the prices of provisions are as dear in France as in England, while those of labour are 76 per cent. lower. We have another proof, if any were wanted, how much too great the population of that kingdom is. The English labourer, who commands steadily eight, nine, or ten shillings a week, by working for a farmer, hazards much when he labours land for himself; and this fact is so strong, that the most industrious and hard labouring of our poor peasants, are not those who keep their little gardens in the best order and cultivation; but such, on the contrary, as make inferior earnings, that mark something of debility. By means of these, and various other causes, the poor countrymen in England find a much more regular employment by day labour than those of France, who, having no resource in working for others, are obliged to work for themselves, or starve. And when gentlemen find them in this situation, no wonder they readily expatiate on the advantages of small properties being to such families the only resource that offers. But, in fact, the very height of opulose culture upon such, and what appears perfection to a vulgar eye, can arise only from the misery of half employed people. The dearness of labour, very common in such a country, is no proof against this observation. No labour is so wretchedly performed, and so dear, as that of hired hands accustomed much to labour for themselves; there is a disgust, and a listlessness that cannot escape an intelligent observer; and nothing but real distress will drive such little proprietors to work at all for others; so that I have seen, in the opulently cultivated parts of France, labour comparatively dear, and ill performed, amidst swarms of half idle people. And here I should remark, the circumstance seen to so strange a degree in almost all the markets of France, that swarms of people regularly lose one day in a week, for objects that clearly shew the little value time is of to these small farmers. Can any thing be apparently so absurd, as a strong hearty man walking some miles, and losing a day's work, which ought to be worth 15 or 20*s.* in order to sell a dozen of eggs, or a chicken, the value of which would not equal the labour of conveying it, *were the people usefully employed?* This ought to convince us, that these small occupations are a real loss of labour; and that people are fed upon them, whose time is worth little or nothing.

There are many practices in French husbandry, that are apparently of considerable merit, yet cannot be recommended to other countries. I have seen them, in a part of Flanders, mattocking up every corner of a field where the plough could not come; and, in the south of France, the peasant makes a common practice of mattocking up whole fields. In many parts of the kingdom all the land is digged. In the mountains of the Vivarais, terraces are built by walling, and the earth carried to them in baskets. Such practices and a thousand other similar, spring absolutely from the extreme division of landed property, having
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nursed up a population beyond the power of industry to support ; and ought to be considered as a proof of a real evil in the vitals of the state. The man who unhappily has existence in a country where there is no employment for him, will, if he has the property of a scrap of land, work for two-pence a day upon it ; he will work for half a farthing ; and, if he has an ardour of industry, for nothing, as thousands do in France. If he does not perform some business, upon his little farm, he thinks he does nothing ; in such a situation, he will pick straws— he will take up a stone here and lay it there : he will carry earth in a basket to the top of a mountain ; he will walk ten miles to sell an egg. Is it not obvious to the reader, that such practices existing, and, if tolerably directed, producing an effect well calculated to command admiration from an extreme of culture, are in reality no more analagous to a well constituted country, if I may venture the expression, than would the most preposterous practices to be fancied. You might as well go a step further in population, and hold up, with M. de Poivre, the example of the Chinese, as worthy of European imitation.

Upon the whole, one must be inclined to think, that small properties are carried much too far in France ; that a most miserable population has been created by them, which ought to have had no existence ; that their division should be restrained by express laws, at least till the demand for hands is equal to the production ; that the system of great farms regularly employing, and well paying a numerous peasantry by day labour, is infinitely more advantageous to the nation, and to the poor themselves, than the multiplication of small properties ; in fine, it is obvious, that all measures which prevent the establishment of large farms, and increasing wealthy farmers, such as restrictions or bars to inclosures, the existence of rights of commonage, and the least favour to little proprietors in levying of the land taxes, are ruinous to agriculture, and ought to be deprecated, as a system destructive of the public welfare.

C H A P. XII.

Of the Sheep of France.

THE establishment of the woollen manufactures in France, in the reign of Lewis XIV. ; or, more properly speaking, by that clerk of a counting house, Colbert, rendered government somewhat solicitous to encourage the breed of sheep in the kingdom ; but no material steps were taken for that purpose, till the middle of the present century, when the free export was allowed.

very wisely to encourage their production. Under the controller general, Monf. de Bertin, Monf. Carlier was sent through all the provinces, to examine the flocks, the quantity and quality of the wool, &c.; and some progress was soon after made in importing, both from Spain and England, rams and ewes, in order to improve the breed of the French sheep; but the people that were employed, understood the business so little, that these efforts were not attended with any effect: they were indeed not respectable ones, and therefore the result was just as might have been expected. France imports of wool to the amount of 27,000,000 liv. a year; an enormous sum for a commodity, every pound of which might be produced in the kingdom, if the proper means were used in the employment of people who really understand sheep.

PICARDY.—*Calais*.—Fleece 5lb. at 26*s.* of a combing fort.

Bonbrie.—Fleece 6lb. at 24*s.*

Bernay.—Fleece 4½lb. at 26*s.*; very coarse; clip their lambs; 18*s.* per lb.; the sheep of the whole province of Picardy, and several of the neighbouring ones, are all without horns; have white faces; and hanging silky ears; all I felt handled badly, and were ill made, but some have rather a better appearance.

PAYS DE BEAUCE.—*Estampes*.—Fleece 3½lb. at 20*s.*; price of a sheep 15 liv.

Toury.—Fleece 4lb. at 19*s.*; coarse; winter food, pea-straw and second-crop hay; all are shut up (as in most parts of France) in stables at night, and folded in the fields till November; some fold also at noon in summer; flocks from forty to one hundred; the dogs conduct them with such dexterity, that the narrowest baulks are fed without injury to the corn.

Orleans.—Fleece 6lb. at 20*s.* Price of a sheep 11 liv. All are fed in the winter with straw.

SOLOGNE.—*La Ferté*.—Breed of Berry 2½lb. at 23*s.* *en suint*, and 40*s.* washed; price of a sheep 12 liv.; have nothing in winter to feed on but heaths and woods; kept in stables every night, to be secured from wolves, and when the snow is deep they are fed with branches of trees; a farmer that has 200 arpents under the plough, and 300 of heath, will have from 200 to 250 sheep and lambs.

La Motte Beuvron.—Feed them in stables with rye-straw, but they eat only the ears. I found a farmer's flock in the stable at three o'clock in the afternoon; it was not at all open, and much too hot. During the summer they are brought home at twelve o'clock, to starve and sweat till four, when they are sent out again, and at night housed regularly. The breed resembles that of Picardy in the face and ears, but are much smaller, not weighing above 9lb. a quarter.

La Loge.—The rot common; one farmer lost 199 in 200, one black sheep only escaping; they are in the common system of selling annually the wether lambs, part of the ewe lambs, and the old ewes, keeping enough of the lambs to reinstate the ewes sold. It is usual to separate the lambs from the ewes, in order to milk the latter for butter and cheese, which the family consumes. The sheep-

sheep-house is cleaned but twice a year, but clean straw given every third day; all these houses are so close and hot that it is astonishing the sheep are not all destroyed.

BERRY—*Verson*.—Fleece $2\frac{1}{2}$ lb. at 22*s*. *en suint*; price of sheep 6 liv.; they are very small, not more than 6 lb. a quarter, and a few goats in every flock; three rams they reckon necessary for 100 ewes; a good ram sells for 24 liv.; an old lean ewe 3 to 5 liv. when fat 8 liv.; the wool in the part of the province called Champagne, where flocks are very large, is far better than here, by reason, as they imagine, of the land being stronger, and the pasture more nourishing; the resemblance to the Picardy breed would make one suppose them of the same stock; the food here, as elsewhere, straw in winter, and when the weather is bad 1 lb. of hay per sheep per diem *; fleece $1\frac{1}{2}$ lb. at 27*s*. *en suint*; price $7\frac{1}{2}$ liv.

Vatan to Chateauroux—Fleece $2\frac{1}{2}$ lb. at 23*s*. *en suint*; last year 27*s*.—Fleece 3 lb. at 25*s*. *en suint*.—Fleece 2 lb. at $23\frac{1}{2}$ *s*. *en suint*; price 9 liv.; wool ten years ago was 15 to 20*s*. Some seigneurs, in order to improve the wool, imported rams and ewes from Spain, which degenerated, and became like the natives in four years; on the other hand, sheep of a worse kind than those of the country, improve in the same proportion by living and pasturing here: I state the information as I received it. In all probability these trials were made in the same careless manner as so many others. They have also another sort of sheep, with horns, which come from the hills, and are called *balloes*; are bought only for fattening, at 8 to 10 liv. and are then sold at 15 liv; they are larger than the common breed; are spotted black and white; have good carcases, but coarse wool.

Argentan.—Wool at 25*s*. *en suint* coarse.—Fleece 1 lb. at 24*s*. per lb.—Fleece $3\frac{1}{2}$ lb. at 20*s*. per lb.; price 8 liv.

LA MARCHE—*La Ville au Brun*.—Fleece 1 lb. at 20*s*.

LIMOSIN—*Limoges*.—They are the smallest breed I have ever seen, and poor miserable looking animals; but both mutton and wool good.

QUERCY—*Brive to Souillac*.—Meet some sheep of a larger breed than the Limosin, with very coarse long wool; black sheep are very prevalent here.—Fleece $4\frac{1}{2}$ lb. at 12*s*. *en suint*; sometimes fatten them on turnips.—Fleece $5\frac{1}{2}$ lb. at 12*s*. † *en suint*. Here see, for the first time, small sheep folds made with hurdles; a small hut of straw for the shepherd, on two poles to carry about; and a little one for his dog. They are now folding for turnips, called here *ravules*.

Pont de Rodez.—Wood 13*s*.; several sheep in all the flocks, with tufts of wool left about their necks and shoulders; on inquiry, found that it is left, on account of superior value, to be clipped by itself; selling at 14*s*. the pound, the rest at 12*s*.

* Monf. de Lamerville says, that the best sheep of Berry are those called *Brionnes*, from the name of the chief place where they are found; that the Berry sheep give $2\frac{1}{2}$ lb. of wool, at 20*s*. and that the lambs sell at 7 liv. each. *Observations sur les Bêtes à Laine*. 8vo. 1786. P. 6, 218, 219.

† In these notes, wherever more minutes than one are entered, they are taken at the distance of some miles.

Pellecoy.—No lambs clipped since I left the Limosin. Measured a sheep-fold seven yards by six; there were thirty-six sheep and five lambs in it; they seem, therefore, to allow a square yard per head; the shepherd was absent, but the dog was left in charge of them. Here they say the tufts of wool are not left for the value, but through a kind of fancy; I suspect something of superstition in it. Every farmer has a few sheep, because the smallest parcel will yield wool to cloath the family; an idea which supposes poverty, and a want of national circulation.

Cabors.—See many sheep-folds; the shepherd's house is something like a tall bee-hive on two handles, to move as a sedan, and a little one for his dog. Having many wolves, they arm their dogs with collars, stuck with iron spikes, for the wolf never attacks them in any other place than the neck. The sheep at this time of the year are folded abroad all night, as their enemy is close in his recesses, the forests and rocky steeps, where they live upon hares, rabbits, rats, and even mice.

Perges.—The sheep with and without horns; a small breed and coarse wool; they are not yet sheared (June 12).

LANGUEDOC—*Toulouse*.—See several flocks, all of horned sheep, for the first time from Calais; horned ones with thick fleeces, I guess 5lb.; see some fine large heavy ones so fat and broad, that when laid down, it was with some difficulty they raised themselves; they are sheared, but some with wool left along the belly, and others with a tuft left on the rump.

St. Gaudents.—Are kept from June till autumn on the hills, the roots of the Pyrenees; and put at night into strong folds, and guarded by many dogs.

Bagnere de Luchon.—Some attempts have been made to improve the breed in this part of the Pyrenees, by the import of Spanish rams; old ewes and wethers here are sold in Spain.

ROUSSILLON—*Bellegarde to Perpignan*.—Large flocks of sheep, both horned and polled, with some black ones.—Ditto polled; white faces, and white legs; about 12lb. a quarter.—They gave 6 to 8 lb. of wool unwashed; washing reduces it to 2lb.—Fleece 2lb. at 39s. washed.—They are kept in the open air the whole year. Are now (July) in stubbles, which will be ploughed up in September, and sown with rye for their winter pasturage.—Meet a flock of near 500, belonging to a man in Perpignan, who has people in the country to take care of his business, especially his sheep. The chief shepherd has four charges of wheat, each ten measures, and each measure gives 60lb. of bread. Four charges of wine, one measure of salt, one of oil, and 3 liv. a month.—Many large flock.—Thus far Roussillon is a very great sheep country; infinitely more so than any I have yet seen in France, and not yielding, in this respect, to Dorsetshire itself.

Pia.—Feed them, with their lambs, very early in the spring with clover sown alone in August on stubbles once ploughed; after it is spring fed, it is watered, and yields in many a full crop of hay.

Salfeze.—

Salfeze—Foet.—Two large flocks and folds.—Ditto with goats.

Sijeau.—Many flocks, and folded in the summer, but housed in the winter, on account of wolves.

LANGUEDOC—*Narbonne.*—Price 15*f. en suint*; 50*f.* washed.—To Beziers, and further, to Pezenas, small flocks all the way, but none large; see some netted folds in olive-ground fallows.

Nismes to Gange.—Many small flocks of sheep.

St. Maurice to Lodeve.—On these mountains (a waste desolate district) there are very large flocks kept: one man has 3000 in four or five different flocks.—Fleece 3½ lb. at 14*f. en suint*; but it is 50*f.* to 58*f.* washed. During snow, they feed on straw—otherwise pasture all the year. Flocks and folds.

Mirepoix.—Their flocks are now in the mountains—but in the winter they are in the vale.—Fleece 2½ lb. at 11*f. en suint*; washed 22*f.* to 25*f.* Coming out of Mirepoix, meet a flock totally distinct from any sheep I have yet seen in France, they would hardly be distinguished from Norfolks; all with horns, and those of the rams turning forward one curl; many of them with black faces and black legs; others dark speckled; wool and shape also carry the same resemblance.

Lann Maison to Bagnere de Bigore.—They have many sheep on their extensive wastes, and the wool sells at 22*f.* to 25*f. en suint*, and double when washed.—Meet, between Bagnere and Campan, four flocks; the sheep larger than Norfolks; most with horns, curling behind the ears, but some polled; some black ones; combing wool of a middling length.

BEARN—*Lourd to Pau.*—The wool of the sheep of Bearn is nine inches long, and sells *en suint* 15*f.* per lb.: pass many folds.—At Pau many flocks and folds: horns; coarse wool; many black sheep.

Navareen to St. Palais and Anspan.—Sheep not numerous, yet much waste; polled; wool six or eight inches long, and very coarse.—Many sheep with coarse wool, price 20*f.* lb. *en suint*.

GASCOIGN—*Bayonne to St. Vincent's.*—These wastes are not without sheep, though there are large tracks under water: meet some small flocks, both polled and horned, with very coarse wool: almost as many goats as sheep.

Granade.—Many small flocks of black sheep; the wool of both white and black coarse and bad; sells at 10*f.* a lb. *en suint*. It is used for the poor people's stuffs.

SAINTONGE—*Monlieu.*—Fleece 1¼ lb. at 20*f.* washed.

Angouleme.—Fleece 1½ lb. at 21*f.* washed.

Contre Verac.—Fleece 1½ lb. at 27*f.* washed.

POITOU—*Vivonne.*—Fleece 1 lb. at 31*f.* washed. Live the whole year round on pasture; straw in the house in winter; never folded.

Orleans to Petiviers.—Fleece 3 lb. at 15*f.* Sheep-folds every where, with the shepherd's house on wheels.

ISLE OF FRANCE—*La Chapelle la Reine.*—Fleece 4 lb. at 13*f.*

Liancourt.—

Liancourt.—Fleece $5\frac{1}{2}$ lb. at 12*s.* *en suint*. Every farmer has a flock, which is folded in summer on the fallows. The breed neither good nor bad; the Duke of Liancourt procured some from Berry, and others from Flanders, for experiment. The former resemble a good deal our South Downs; the wool a fine carding sort. The latter a well formed sheep, with very coarse wool. The wool of the country, of which the price is named above, is very bad.

Beauvais to Izoire.—A better breed than common; polled; large; well made; fleece $5\frac{1}{2}$ lb.: every man has his fold. Flocks this morning (Sep. 10.) in a heavy rain; at ten o'clock, still in the fold.

Dugny.—Mons. Cretté de Palluel's system is, to buy wethers in June for folding till November, when he sells about two-thirds of them half fat to the butcher; the other third he keeps fattening in the winter in the stable entirely on corn, bran, hay, &c. to be ready for the markets, when mutton grows dearer. It is now (October) 6*s.* and 7*s.* per pound; but from Easter, to the end of June, 2*s.* or 3*s.* more. The variation in beef is rather less. It is now 9*s.* or 10*s.* and cow beef 7*s.* but in May 2*s.* more. This inequality in the price of meat, is a certain proof of bad husbandry. I viewed his sheep-house, which is an arched stone building, without any yard for them to be in at pleasure; the windows small, and consequently the animals kept infinitely too hot.—There are men in this country that have large flocks of sheep, without an arpent of land; they let them to farmers, who have no sheep, at from 30*s.* to 40*s.* a head, and food from June to November for folding.

Dammartin.—Many flocks; fleece 5 lb. at 20*s.* *en suint*.

PICARDY—*St. Quintin.*—Every farmer has a flock now folding for the last sown wheat: they are the Picardy breed; 4 or 5 lb. wool at 24*s.* *en suint*: hoggits $2\frac{1}{2}$ lb.

FLANDERS—*Bouchaine.*—Every farmer has a flock; they give 4 to 5 lb. of wool, which sells at Lille for 30*s.* the pound washed.

Valenciennes to Orchees.—Long combing wool 5 lb. at 30*s.* the pound washed. They give them, in the winter, beans in the straw, unthreshed.—I saw some wethers bought at 21 liv. each, lean, which was about the price they would have sold for in England.

Lille.—But few in this neighbourhood; 5 lb. at 30*s.* washed*.

ARTOIS—*S. Omers.*—Meet a flock of 200—the Flanders breed; wool seven or eight inches long; $5\frac{1}{2}$ lb. each fleece, at 25*s.* washed. These sheep have the clean silky ears of those of Picardy; but with bodies dirty from the stable.

Bethune.—See a flock of two year old wethers, whose wool this year produced 9 liv. each. The same breed as before. Feed them in winter on beans and straw.—Fleece 5 lb. at 25*s.* washed.

* The Marquis de Guerchy says, there are long wools at Turcoin, Lille, and Varneton, that sell at 50*s.* and 60*s.* the pound. *Mem. pour l'Amélioration des Bêtes à laine.* 8vo. 1788. p. 3.—I did not meet with them.

Arafs.—Sheepfolds thinly scattered thro' all the country.—Fleeces 5liv. each.

Dourlens.—Fleeces worth 4liv. each.

Amiens.—I was offered 45*s.* a pound for common Lincoln combing wool, neither long nor short of the kind; this is about 20d. the pound English—but trade is very slack at Amiens.

Peix to Aumale.—Flocks large; 200 to 400. Fleeces 4lb. at 33*s.*

Neufchatel to Rouen.—The same breed as in Picardy; give 4lb. at 33*s.* washed.

Yvetot.—3lb. at 32*s.* They are folded for wheat.

Bolbec.—4lb. at 33*s.* never any other green food in winter than what they can pick up.

Honfleur.—Sheep give fleeces of 6lb. *en suint*, which are 3lb. washed, and sell at 30*s.*—Fleece 2lb. washed; 5lb. *en suint*, price 30*s.*—Red faces and red legs.

Pays d'Auge.—35 to 36*s.* per lb. ditto.

Valley Corbon.—5lb. *en suint*, 2½lb. washed; sells at 20*s.* per lb. *en suint*, or 40*s.* washed—about five inches long. The sheep in Normandy seem very generally to be the red faced and red legged breed.

Falaise.—Fleeces 3½lb. at 24*s.* washed.

Duc de Harcourt.—Fleeces 4lb. at 40*s.* washed, or 20lb. *en suint*. There is some Spanish blood in a few, but so crossed and neglected as to be hardly perceivable. Here, as in most other parts of France, when you would have a sheep caught that it may be examined, the shepherd orders his dog to drive the flock around his master, which he does by going round them in a circle gradually decreasing, till the shepherd takes any one he wants. How infinitely superior to our barbarous methods?

Carentan.—Sheep, in the rich marshes, the same as on the hills; the red face and red leg breed; these marshes are as capable of carrying to perfection the longest wool, as any land in Lincolnshire. Wool 4 inches; 40*s.* per lb. washed, and 20 or 22*s.* *en suint*.

Piere Butte.—Mons. Doumerc buys sheep at two years old, and sells them at three, to those who fatten them. They are small, and pretty well made, without horns; face and leg white—somewhat inclining to reddish, as if a mixed Norman breed. The wool sold this year at 45*s.* per lb. washed; but at 18*s.* only if *en suint*.

BRETAGNE—*Broons.*—Poor little sheep, not more than 10lb. a quarter when quite fat. Very few sheep, after entering this province.

Landervisia.—At a fair here no sheep at all; and all the way from Rennes to Brest, there are scarcely any to be seen—yet a waste country, and very well adapted to them.

La Roche Bernard to Guerande.—I have now passed through almost all Bretagne, and seen scarcely one sheep, where there ought to be an hundred; but here

here are some flocks of poor black things, which shew the carelessness and savage ignorance of the inhabitants.

Savanal to Nantes.—Rich salt marshes fed by little miserable black sheep, with wretched coarse wool, where the longest woolled sheep of Lincolnshire would thrive and fatten. Miserable black sheep on all the wastes.

Varades.—Very poor sheep; many black, and some with red faces, but they are better than those on the *landes*.

ANJOU—Angers to La Fleche.—The number of sheep in this ride of thirty miles quite insignificant; now and then four or six, and once about twenty; but they are superior to the wretched animals of Bretagne; are worth about 12 liv. each, and yield 4lb. of wool, at 36*f.* the lb. washed; yet there is not a country in Europe better calculated for them, as it is all a dry sound sand and gravel, and not too poor.

Tourbilly.—Wool 36*f.*

NORMANDY—Alençon.—The Norman breed here, of red faces and legs, and no horns; they are worth 12 or 14 liv. each; 3lb. of wool, at 12*f. en suint*, or 30*f.* washed.

Nonant.—Many flocks; wool 12 to 18*f. en suint*, and 35*f.* washed; 1½ to 2½lb. each fleece; the sheep sell at 15 liv.; they are never folded; the breed the red face and leg.

Gacé to Bernay.—Red face and leg; 2½lb. of wool, at 36*f.* to 40*f.* washed.

Lessiniolle.—Many flocks.

Brionne.—Many flocks; wool this year (1788) 32*f.* last year 36*f.*; fleece 2½lb.

Rouen.—Waited on Mess. Midy, Roffec, and Co. the greatest wool-staplers in France, and to whom I had letters of recommendation; they were so obliging as to shew me the wools in their magazines, explain the prices, and allow me to take specimens: those I particularly noted were:

Tyow and Nkmark.—Combing; the price 36*f.*; three years ago 26*f.*

Mecklenburgh.—Combing 32*f.*; three years past 24*f.*

Griesclaire.—Combing 26*f.*; three years ago 20*f.*

Cawntebianche.—Carding 26*f.*; was 20*f.*—*Damthan.*—26*f.*; was 20*f.*

Mittelband.—22*f.*; was 12*f.*—*Gusfrow.*—Brebis 20*f.*; was 16 to 18*f.*

Loquets.—(Locks) carding 12*f.*; was 6 to 8*f.*

Eyderstadt.—Combing 38 to 40*f.*; was 28 to 30*f.*

Pologne.—Combing 28*f.*; was 18 to 20*f.*

FRENCH—Berry.—Carding 3 liv. to 3 liv. 4*f.*; tare 8lb. per sack.

Sologne.—Carding 2 liv. 10*f.*—*Roussillon.*—Carding 3 liv. to 3 liv. 10*f.*

Pays de Caux.—Combing 36 to 38*f.*—*Poitou.*—Carding 48 to 50*f.*

SPAIN—Segovie.—Carding 6 liv.—*Segovaine.*—Carding 4 liv. 10*f.* to 5 liv.

—Conditions of sale, tare 10 lb. and 3 lb. allowed.

S H E E P.

425

R.	-	-	-	180
Tare	-	-	-	13
				<hr/>
				167
Tare again,	-	-	-	15 or 9 per cent.
				<hr/>
Net	-	-	-	142 at 120/.

And seventeen and eighteen months credit, and bills taken at two, three, and four months to run. This for three sorts Spanish, 120/. 105/. and 95/. The German wools, 110 given for 100, tare 6 per cent, for long credit. The rise in the price of the German wools proceeds entirely from a great mortality, which has for two or three years lessened the quantity considerably; the fall in the Spanish may be ascribed to a decline, either real or apprehended, in the French fabricks; the manufacturers affirming they have great stocks of cloths unfold. No English; but they would give 38 to 40/. per lb. for the combing sort, at the present prices; that is, the price of Eyderstadt.

Totte.—Many sheep-folds, and, like most others in the kingdom, double, that the shepherd may change them in the night; see a flock of hoggits now worth 12 liv. each; no horns; fleece 2½ to 3 lb. at 34/.

ISLE OF FRANCE—*Nangis.*—Price of wool 30/. washed, or 15/. *en suint*; they never sell lambs, but old ewes and wethers at five years old, lean in November 9 to 10 liv. each, fat 12 to 15 liv.; give them nothing in winter but straw. See *Monf. du Prayé's* sheep in fold on the fallows at noon; wethers bought in merely for folding, at 14 to 15 liv. which will be fold in November, at a loss; and this pretty system merely to get five or six septiers of wheat! the septier half an English quarter (6½ coomb per acre); sheep (called) fat from Sollogne 13 to 15 liv. each. Faggots here are made in summer, while the wood is in leaf, and laid up for feeding sheep in the winter.

Neuf Moutier.—Fleece 6 lb. to 8 lb. at 12/. *en suint*.

CHAMPAGNE—*Mareuil.*—The King of France having imported some Spanish sheep, gave the provincial assembly of Champagne a lot of a ram and fourteen ewes, which were committed to the care of *Monf. Le Blanc* of this place. I viewed them with attention, and found the carcass of many of them as ill made as the wool was excellent. The ram clips 6½ lb. of wool; the sheep 3, 4, and 5 lb.; and the price of some of it has risen as high as 4 liv. and 4 liv. 10/. per lb.; 4 lb. at that price is 14s. 10½d. for the fleece: I saw the wool in the fleece, but it did not appear to me equal to such a price.

Rheims.—Wool of Champagne this year 30/. per lb. In 1788, 30/. In 1787, 26/. In 1786, 25/. Such an increase of the price of wool is a very strong presumption that the sheep have experienced no epidemical distemper; and that the manufacture is flourishing; and it is not improbable that the de-

duction of half from the earnings of the poor spinners is very much *à l'Anglois*; that is to say, an injustice.

Chalons to Ove.—A flock of sheep belonging to every community, 2, 3, or 400 in each; 380 in one, the shepherd of which I conversed with; there are twelve or fourteen owners. The sheep give each 3 or 4 lb. of wool, which this year fold from 26*s.* to 30*s.* washed. They are never folded, on account of the smallness of the properties.

LORRAINE—*Braban.*—Sheep sell at 9 liv. Wool 1½ lb. each fleece, at 32*s.* per lb. washed.

Luncville.—The wool is washed on the sheep's back before clipping, which is uncommon in France; the fleece 2 to 3 lb. price last year 29*s.* this year 30*s.*

Blamont to Haming.—See one sheepfold, the first in the province; and I saw but this.

ALSACE—*Straßbourg.*—The sheep are washed before clipping; wool 24*s.* fleece 2 to 3 lb. twice a year, 1 lb. each, at Easter and Michaelmas.

Isle.—Small sheep, that give from ½ to 1½ lb. of wool, that sells at 36*s.* to 40*s.* washed. There are some wethers that do not weigh more than 4 lb. a quarter.

FRANCHE COMPTE—*Besançon.*—Clip their sheep always twice a year, in May and in autumn; and to the second they give the same name, as to the second hay crop, *regain*; the first yields 1½ lb. the second ¾ lb.; some assert the first to be the finest wool, others the second, but they go together in price, this year and last 36 to 40*s.* washed, some years past 20 to 24*s.* only. Near Lyons the sheep go cloathed into the vineyards during winter, to preserve the wool; I enter this where I have the intelligence, but I know how to credit it. What cloathing would not be torn to tatters among the vines?

BOURGOGNE—*Dijon.*—Sheep clipt twice a year; the first the best; washed on the back before clipping; price 40*s.*

Couch to Mont Genis.—Poor little miserable sheep on the high grounds.

Maison de Bourgogne to Luzey.—Clip but once a-year; wool 30*s.* per lb. washed; was two years ago but 24*s.*

BOURBONNOIS—*Chavanne.*—Twenty miles, one little flock only of poor miserable sheep of about 10 lb. a quarter, yet the country is adapted to nothing so much as sheep.

Moulins.—Fleece 2 to 3 lb. at 26*s.*; washed coarsely; lambs at four or five months old sell at 3 liv.; sheep 15 liv. the pair.

AUVERGNE—*Aigue Presse.*—A sheepfold, and shepherd's house on wheels; the first I have seen for some hundreds of miles.

Riom.—Many sheep and folds all the way.

Clermont.—Salt given every eight or ten days to sheep; price 10 to 18 liv. the pair; wethers 24 to 40 liv. the pair; a lamb of four or five months 4 liv.; fleece

of

of a wether *en suint* 3 lb.; washed $1\frac{1}{2}$ lb.; of an ewe 2 lb. *en suint*; 1 lb. washed; price *en suint* 16 to 18*s.*; washed 30 to 32*s.* In the mountains, price of coarse wool *en suint* 10 to 18*s.*; and washed 28 to 30*s.* per lb.; spinning a pound of coarse 10*s.*; fine ditto 12 to 16*s.*

Izoire.—Price of lean wethers 12 liv.; a fleece $2\frac{1}{2}$ lb. at 15*s.* *en suint*.

Briude.—Wool 80 liv. the quintal; per lb. *en suint* 16*s.* and so dirty that it loses half; fleece of a wether 3 to 4 lb.; of a sheep, 1 to 2 lb.

Fix to Le Puy.—Price of sheep 20 to 24 liv. the pair; the fleece 3 liv. at 14 or 15*s.* *en suint*.—Folds.

VIVARAIS—*Pradelles*.—Wethers 10 or 12 liv.; fleece of ditto 3 or $3\frac{1}{2}$ lb.; of sheep 2 lb.; price 14 or 15*s.* *en suint*.

DAUPHINE—*Montelimart*.—A great change on crossing the Rhone.—In the Vivarais the sheep are poor little things, but on the other side of the river good and large. The price of wool was last year 60 liv. for 93 lb. *en suint*; this year 40 liv.—It loses half in washing. The fall is attributed to the want of oil in Province for combing it; it is all combing wool though short, and olive oil only is used in the operation. A flock of one-third ewes, one-third wethers, and one-third lambs, will give all round 5 lb. of wool each—all sold at an average price, but that of lambs the most valuable! hats are made of it.—The sheep in this country feed readily on the *trifolium bituminosum*, the scent of which is very strong. A gentleman, near this place, has a flock partly Spanish and partly cross-bred sheep, which succeed well; and the wool sells at 3 liv. per lb. All the farmers here, just as in the Vivarais, have long small troughs on legs, in which they give salt regularly to their sheep mixed with bran every fifteen days. Feeding in the dew is found to rot them more than any thing; on which account, they do not let them out of fold till the sun has exhaled it; salt is the preservative against that distemper. The quantity they give is 3 lb. to forty sheep. It is remarkable that they fatten the faster for feeding in the dew, but must be killed within a few months, or they die rotten. Monsr. Faujas de St. Fond has found it very useful to give them oak bark pounded, and a little moistened with bran; it is good in the manner of salt as a preservative against the rot, and has its effect also against the *enflé*.

PROVENCE—*Avignon*.—Very few kept; price of the wool 10*s.* the pound *en suint*; 4 lb. per fleece.

Tour d'Aigues.—There is, in Provence, as regular an emigration of sheep as in Spain; the march is across the province, from the Crau to the mountains of Gap and Barcelonetta; not regulated by any other written laws than some arrets of the parliament to limit the roads to five toises of breadth; if they do any damage beyond that, it is paid for. The Barcelonetta mountains are the best; they are covered with fine turf, *gazoné superbement*; the sheep belong to per-

sons about the Crau, at Arles, Salon, &c. The President de la Tour d'Aigues calculates them at a million. They come from the mountains in autumn fat. The Crau shepherds hire the feed in the mountains, at 20*s.* each sheep for six months; and the Crau price for winter is the same. They give 8 or 9 lb. of wool *en suint*; this year they sold at 45*s.* the fleece; last year 56*s.* Mons. Darluc*, who gives a detail of these sheep, asserts also, that their number is a million; and that they travel in flocks of 10,000 to 40,000, and are 20 to 30 days on the journey; but he says, the fleece is 5 or 5½ lb. only. They fold neither the Crau sheep, nor those at Tour d'Aigues. But in the Cammargue, where are no stones, and where the sheep do not travel, they fold them. It is remarkable, that the Crau sheep are never in stables either in winter or in summer. Sheep in general 5 lb. each fleece, at 8*s.* *en suint*. The common calculation 40*s.* It is most miserable hairy stuff. Wethers 12 to 14 liv. each. The lamb of an ewe pays 3 liv. and the wool 2 liv. which makes her produce 5 liv. I viewed the stock of the Spanish breed, of which the president has given a very interesting account in the memoirs of the Society of Agriculture at Paris; and of which I inserted a translation in the Annals of Agriculture, vol. xii. p. 430. They have been introduced some years ago, and, from the president's absence, much neglected; some of the ewes I found very old and lean; in general, the form was not so bad as I expected, particularly the back-bone, which, in many Spanish ones I have seen, is quite ridged. The wool is close and tolerably curled, but not so hard coated to the feel as some I have seen. Their wool was sold this year at 75 liv. the quintal, *en suint*. I heard of some who had tried the Spanish breed, but had left them off, because they did not answer, eating much more than their own breed; I place no confidence, however, in the accuracy of these experiments. The president is now making elm faggots to lay up for the winter food of his flock. It is the common practice of the country; elm best; then poplar; oak good.

Estrelles.—Price of wool 36 to 50 liv. the 100 lb. *en suint*. Fleece 4 to 4½ lb.

Lyons.—Inquired for the cloathed sheep, but found nobody that had seen them.

St. Martin.—From Lyons hither, 67 miles, in a country adapted to sheep, yet I have not seen fifty.

Roanne.—Fleece washed 22*s.* the pound.

Neuvy to Croisier.—A few flocks of forty or fifty, poor, small, and ill looking,

Recapitulation.

Average weight of all the fleeces minuted,	-	3½ lb.
_____ fleeces sold <i>en suint</i> ,	-	4
_____ washed,	-	3
Average price per lb. <i>en suint</i> ,	-	18 <i>s.</i>
_____ washed,	-	30

* *Hist. Nat. de la Provence*. 8vo. 1782. tom. i. p. 303, 324, 329, &c.

The reader should be particularly cautioned against drawing conclusions from the rates and weights of the wool here minuted clean and dirty; for, being taken from notes made at distant and distinct places, it does not follow, that the proportion between washed and unwashed is, in weight, as 3 to 4 lb. or in price, as 18 to 30*s*. to discover the latter proportion we must have recourse to those minutes only, which, *at the same place*, give the price both washed and unwashed. The average prices of these are—

<i>En suint</i> ,	-	-	-	-	16 <i>s</i> .
Washed,	-	-	-	-	37

And I am therefore inclined to fix on the following, as the data to be drawn from the preceding minutes.

Average fleece <i>en suint</i> ,	-	-	14 lb.
Average price per lb.	-	-	18 <i>s</i> .
Which would be, washed,	-	-	41

The average of very numerous minutes, is 18*s*. per lb. *en suint*; and then, to find the proportion washed, I take that between 16 and 37*s*. which gives 41*s*. for the general price washed. That the difference between washed and unwashed is moderate in these notes, will appear from those of Monf. Carlier, viz.

Rouffillon,	-	11 <i>s</i> . <i>en suint</i> ,	—	38 <i>s</i> . washed.
Cammargue,	-	12	—	24
Prevence,	-	10	—	20
Saintonge,	-	10	—	20
Berry,	-	16	—	38
Beauce,	-	8	—	16
<hr/>				
Average,	-	11	—	26

Now, it is worth nothing, that 16 and 37, or 18 and 41, bear the same proportion as 11 and 26, which is the result of this gentleman's enquiries in those six provinces*. In my farming travels, twenty years ago, through England, I found the average fleece 5½ lb. at 5½*d*. per lb. But the average price, in 11 counties in 1788, was 9½*d*. per lb.—The average fleece of washed wool in France being, according to these notes, 3 lb. at the places where the price is settled washed, and 4 lb. *en suint*, the mean of the whole kingdom cannot be more than 2½ lb. washed. The fleeces of England are therefore doubly more heavy. But the price in France at 41*s*. and, deducting for the difference of French and English weight, is something more than 1*s*. 6*d*. per lb. for (on an average) worse wool. But the trade in wool is free in France. As the French price is the fair one of Europe, that of England being artificially depressed, we are not to judge of the quality of the wools of France, relatively to our own by the price; for they

* *Traité des Bêtes à laine.* 4to. 1770.

have in fact (those of Rouffillon, Narbonne, and Berry for carding wools, and of Flanders for combing, alone excepted) very few that are so good as ours.—We have a great deal of bad wool in England, but the French have much more; and indeed seem to have managed this branch of their agricultural œconomy as they have done almost every other. Rouffillon is a part of Spain rather than of France, and therefore it is the Spanish blood that has given good wool there; and Flanders is an Austrian province; thus France, properly so called, had nothing but the Berry wool to pride herself upon; and that only in a small district of a small province. But the management of sheep, throughout the kingdom, is the most abominable that can be conceived. It appears, by the notes, that in winter they are, according to our ideas, universally starved; that is, fed upon straw; for as to a provision of green winter food, cultivated purposely for them, of which no good farmer in England is ever destitute, there is not such a practice in France, from one end of the kingdom to the other. The consequences of this, are these poor fleeces, a bad quality of wool, and one sheep kept where there might be an hundred. Hence also the necessity of an immense import of every kind of wool; and, what is still much worse, such a deficiency of sheep in eighteen-twentieths of the kingdom, that every article of husbandry suffers; and meat is so much dearer than bread, that it cannot be purchased by the poor. All these are great evils, and deserve a deep consideration from every friend of his country, to take the proper means of remedying them; which, however, is not likely ever to be done effectually, till a large farm, on a poor soil, be fully stocked with a well fed flock as in England. But the deficiency of food is not the only point that wants to be remedied—the management of their stables is an enormous evil. To reap the benefit of manure, at a season that prevents the shepherd from resting abroad with his flock, out of an apprehension of the wolves, the sheep are almost universally housed at night throughout the winter: there is nothing objectionable in this, for much dung may be, and is certainly made by it: but the close suffocating heat of the stables is such, that the health of these animals suffers dreadfully; and epidemical disorders often break out, arising principally from this cause. Notice is taken, in the minutes, of the sheep being also thus confined in the middle of the day in summer. The stables are cleaned but once a-year, or, at the most, but twice. Thus the flock lies on a dung-hill, and breathes the effluvia of it, instead of air. Before clipping, it is kept for some time, without fresh straw, that the wool may be rendered dirty, and therefore heavy; and some men throw water on the dung, to excite a fermentation, that the fleeces may be so impregnated with moisture, as to weigh to the satisfaction of the owner. This management is now and then rewarded, as it ought to be, with the loss of whole flocks in a single night; such barbarous practices will easily lead the reader to judge of the profound ignorance of the French with

with respect to sheep*. There is no doubt, that they ought never to be housed by force; but to have the choice in a yard, securely walled in, to be under cover, or exposed to the weather at their pleasure. I have myself a farm too wet for folding abroad in winter; and therefore use a well littered yard and barn, in which the sheep are dry and clean, and not hotter than they please to be. I find the practice very beneficial; but mention it here only cursorily, as I have in another work † expatiated largely upon it.

One of the most singular practices in the eyes of an Englishman, that is to be met with abroad, in the management of sheep, is the regularity with which salt is every where given to their flocks, and also to cattle. The practice is of great antiquity. The ancients were in a regular practice of giving salt to sheep. Columella tells us, that if the pasture for this animal were ever so sweet, yet it would grow stale to them if they have not salt given in wooden troughs‡. It appears, from an imposition established so long ago as 1462, in the Milanese, that the consumption of salt is reckoned at 28 lb. for each head of cattle §. In France it is conjectured to amount to 50 lb. ||, and for sheep to 15 lb. where the sale of it is free. The same author mentions it as a known fact, that cows give the more milk for it; sheep finer wool; and that all animals are kept by it in good health. In some of the *cabiers* of instruction to the deputies in the National Assembly, salt is considered as essential to the well-being of cattle, *indispensable aux bestiaux* ¶. Mons. d'Abenton directs 1 lb. every eight days to twenty sheep**. In Spain it is as common as it is in Italy and France; a *fanega* of salt, or 100 lb. is allowed for one hundred sheep, by law; but they use fifteen and twenty *fanegas* for 1000 sheep ††. In a memoir on the Spanish flocks, by

* A French writer very erroneously says, that the English lose prodigious quantities of sheep by folding. *Mem. sur l'Agriculture, par M. Lormoy.* 8vo. 1789. p. 47. No such thing.—One would think that the management of English sheep were as well known in France as other parts of English agriculture. Another writer says, that short woolled rams sell in England much dearer than long woolled ones. *Mem. pour l'Amelioration des Bêtes à laine dans l'Isle de France.* 1788. p. 8. Just the contrary.—Ten guineas is a high price for a ram in Suffex, the finest breed of the short woolled kind; whereas a long woolled ram in Leicestershire has been let at one thousand guineas for a single season.

† *Annals of Agriculture.* Vol. xv. No. 87.

‡ Nec tamen ulla sunt tam blanda pabula, aut etiam pascua, quorum gratia non exole scat usu continuo, nisi pecudum fastidio pastor occurrerit prebito sale quod velut ad pabuli condimentum per æstatem canalibus ligneis impositum cum e pastu redierint oves, lambunt, atque eo sapore cupidinem bibendi pascendique concipiunt. Lib. vii.

§ *De l'Administration Provinciale, par M. le Trone.* 8vo. 1788. tom. i. p. 237. || Ibid.

¶ *Cabier du Tiers Etat de Toul.* p. 17. Also, *De la Noblesse de Clermont Ferand.* p. 22.

** *Instruction pour les Bergers.* 8vo. 1782. p. 105. See also, *Traité d'Economie Politique.* 8vo. 1783. p. 545.

†† *Essai Hist. & Pol. sur la race des Brebis, trad. d'Alstrom.* 12mo. 1784. p. 47.

the late Mr. Collinson, the account is more particular and curious. "The first thing the shepherd does when the flock returns from the S. to its summer downs, is to give the sheep as much salt as they will eat. Every owner allows his flock, of a thousand sheep, twenty-five *quintals* of salt, which the flock eat in about five months; they eat none in their journey, nor in their winter-walk. It is believed, that if they stinted their sheep of this quantity, it would weaken their constitutions, and degrade their wool; the shepherd places fifty or sixty flat stones, at about five steps distance from each other; he strews salt upon each stone; he leads the flocks slowly through the stones, and every sheep eats to his liking. What is very remarkable is, that the sheep never eat a grain of salt, nor wish for it, when they are feeding on land which lies on lime-stone; and as the shepherd must not suffer them to be too long without salt, he leads them to a spot of clayey soil, and, after a quarter of an hour's feeding them, they march back to the stones and devour the salt. So sensible are they of the difference, that if they meet with a spot of mixed soil, which often happens, they eat salt in proportion." The practice is found equally in Germany; the late King of Prussia, by ordonance, expected his peasants to take two *mebzen* (9lb.) for each milch-cow, and one *metze* for every five milch-sheep, and half as much for such as do not give milk;*; and in Bohemia the price of salt is found very prejudicial to the flocks†. The Hungarian peasants lay pieces of rock-salt at the doors of their stables, cow-houses, &c. for cattle and horses to lick‡. It is known also in Poland§. Throughout all North America salt is given to cattle and horses once or twice a week||. Paoletti, a practical Italian writer, orders 1lb. to each sheep in autumn, and another in spring¶. Mons. Carlier decides against it, but on very insufficient authority**. Mons. Tessier unites with the common practice, by recommending it††. This practice, which is unknown in England only, merits I believe much more attention than the English farmers are willing to give it, at least those with whom I have conversed upon this subject. I have tried it for two years past in my own flock; and though it is very difficult to pronounce the effect of such additions to their food, except after long

* *Mirabeau de la Monarchie Prussienne*. Tom. iv. p. 102.

† *Ibid.* Tom. vi. p. 236.

‡ Keyser's Travels. 12mo. 1758. Vol. iv, p. 242.

§ Sir Thomas Pope Blount's Nat. Hist. 12mo. 1693. p. 220.

|| Smyth's Tour in the United States. 8vo. 1784. Vol. i. p. 143.—*Bartram's Travels*. p. 354.

¶ *Pensiere sopra l'Agricoltura*. 8vo. 1789. p. 209.

** *Traité des Bêtes a laine*. 4to. Tom. i. p. 296.

†† *Observ. sur Plusieurs Maladies de Best.* p. 67. See also, on this subject, *Markham's cheap and good Husbandry*, p. 111. 120. *Parkinson's Theatrum Botanicum*, p. 552. *Maison Rustique*, p. 107. *Hartlib's Legacy*, p. 199. *Mills' new and complete System of Practical Husbandry*, vol. iii. p. 416. *Memoirs of the Bath Society*, vol. i. p. 180. And a curious passage in *Birch's Edition of Boyle*, vol. v. p. 521. *Dr. Blower to Mr. Boyle*.

and repeated experiments, I have, I think, reason to be satisfied, my sheep having been very healthy, and once or twice so, when my neighbours suffered losses.

The breeds which I have noted in France are, 1, The Picardy; hornless; white faces; and silky hanging ears. This I take to be a bastard breed of Flanders; the wool coarse; of middling length. 2, Normandy; red legs and red faces; coarse wool. 3, Berry; resembling somewhat the South Downs of England; fine wool. 4, Spanish in Roussillon, and in part of Languedoc. 5, Near Mirepoix, a sort that resembles Norfolk sheep; with horns; black faces and legs. The rest, I apprehend are all mongrels, without any strong features to discriminate them. The badness of the breeds, and the ill management of sheep in France, is the more surprising, as I conceive there is no country in Europe better adapted to this animal. The soil is, in general, dry, and the climate much less humid than that of England, which circumstances are of essential consequence for commanding great success with sheep: wet land and a wet climate are, next to French management, by far their greatest enemies. The old government often expressed a great inclination to take whatever steps might be deemed necessary to improve their sheep; I have noted the controleur general Bertin employing Monsr. Carlier to travel through France, from 1762 to 1766, for examining the flocks; and Monsr. d'Aubenton acknowledges, that whatever he executed in regard to importing the Spanish breed, was done at the instigation of another controleur general. "Monsr. Trudaine ne m'a rien laissé à désirer de tout ce qui pouvoit m'être utile pour remplir mon objet." Much encouragement has since been given to Monsr. Delporte, of Boulogne, for importing a flock of English sheep; and the late Marquis of Conflans bought, for the provincial assembly of Normandy, one hundred English rams, which were to be landed at nine guineas a-piece. The government was always inclined to be liberal upon this business, but never took the right steps. I viewed several parcels of sheep that were said to be Spanish, but never saw a single one that gave wool comparable to Spanish; and I was assured, by very respectable manufacturers, at Louviers and Elbœuf, that not one fleece of such has ever been produced in France, and that the Roussillon wool is the best in the kingdom. The Spanish sheep I examined in France were such ill made animals, that as much would be lost in the carcass, and in the want of disposition to thrive, as could be gained in wool, supposing it as fine as possible. The English sheep which I saw were chosen pretty much in the same manner; and no wonder, as smugglers had been the agents, who would of course procure such as were to be had cheapest. Where the Marquis de Conflans bought his English sheep, I never heard; by his death France lost them, and, if I may judge from the others I have seen, the loss is not great. All these exertions have been made by people whose professions, habits of life, employments, and pursuits have been

far removed from agriculture; usually by inhabitants of the capital, or other great cities.—In a word, they have been made by men, in whose hands success was impossible. If the government had, for the introduction of Spanish wool, fixed a Spanish farmer, with Spanish shepherds, and a Spanish flock, in such a district as the Crau, in Provence, to enjoy their annual emigration, it would have been known what could really be done in carding wool. And if an Englishman, with a flock of well-chosen Lincolnshire, or Leicestershire, long woolled sheep, had been fixed in the Pays d'Auge, with a salary of five hundred louis a-year for himself, and with every other expence amply provided, it would at once have been found, that as long and as fine combing wool may be produced in France as in England. But such establishments would depend absolutely on the choice of the men; in some hands the whole expence would be thrown away; in others not a penny of it would be lost.

C H A P. XIII.

Of the Capital employed in Husbandry.

THERE is no light in which the agriculture of France can appear to less advantage than upon this head. It is scarcely credible how the metayers are able to support themselves with a stock so much inferior to what would be necessary to a good cultivation. In all the provinces which are backward in point of agriculture, as Bretagne, Anjou, Maine, Touraine, Sologne, Berry, La Marche, Limosin, Angoumois, Poitou, part of Guienne and Languedoc; in Champagne, Loraine, Franche Comte, Bourbonnois, Nevernois, Lyonois, and part of Auvergne, Dauphiné, and Provence; the stock of every sort upon the farms, whether belonging to the landlord or the tenant, would not rise to 20s. per English acre, and in many districts not to 15s. The pastures of Normandy, and the arable lands of Flanders, and part of Artois, are well stocked; but there is a great deficiency in every other part of the kingdom, even in the best provinces. The quantity of sheep and cattle is every where trifling in comparison of what it ought to be. The implements of husbandry are contrived for cheapness, not for duration and effect; and such stacks of hay in store, as are found all over England, are rarely seen in France. Improvements invested in the land, by marling, draining, &c. which, on farms in England, amount to large sums of money, are inconsiderable even in the best parts of France. And beside the stock, transferable from tenant to tenant, the investments, which in England fall upon the landlord, such as all sorts of conveniences

niencies in building, fencing, gates, stiles, posts, rails, &c. which he must provide or repair for a new tenant, are done in England at an expence unknown in the greatest part of France; not but that in some provinces, especially in the northern ones, the buildings are substantial, and erected on a large scale. I shall, however, have no doubt in calculating the inferiority of France in its present state to that of England, in the circumstances of building, inclosing, marling, claying, draining, laying to meadow, and other *permanent* improvements, at 30s. an acre over the whole territory. It is 40s. or 50s. inferior to all our well improved counties; but as we have some backward in agriculture, as well as France, I calculate the whole at 30s.

I have calculated the capital of the farmers in all the provinces of the kingdom, and the medium of my notes is 40s. an acre. A similar calculation of the capital employed in the husbandry of England gives 4l. per acre*; in other words, 40s. more than is found in France: add 30s. for the less quantity of permanent improvements; and we have the total of 3l. 10s. per acre for the inferiority of French to English capital employed in agriculture, which, upon 131,000,000 of acres, forms a deficiency of 458,500,000l. sterling, or 10,480,000,000 of liv. —above ten milliards. Hence it is, that it would demand this vast sum to be expended and invested in the agriculture of France, to bring the whole of that kingdom to an acreable equality with England; and I am confident, that I have not been guilty of the least exaggeration. The capital of farmers in England being 4l. per acre, let us calculate that of Scotland at 30s. and that of Ireland at 40s.

England,	-	46,000,000 acres at 4l.	£. 184,000,000
Scotland,	-	26,000,000 at 30s.	39,000,000
Ireland,	-	26,000,000 at 40s.	52,000,000
<hr/>			<hr/>
98,000,000			275,000,000
<hr/>			<hr/>
France,	-	131,000,000 at 40s.	262,000,000

The capital employed, therefore, in husbandry in the British isles, is considerably greater than is employed in France. It surely is not necessary to observe, in this age, that the productive state of agriculture in a country depends much more

* It will be proper here to explain what I mean by *capital*. A farmer, in England, who stocks a farm, finds it necessary, on entering, to have a given sum of money for engaging in, and carrying on the business through the first year, in which is reckoned a year's labour, rent, tythe, seed, &c.; and this sum varies generally from 3l. to 5l. an acre: if the accounts of the same farmer be examined some years after, he will be found to have stock to a greater value, having increased it in cattle, sheep, manuring, and other improvements, for which he would be paid if he suddenly left his farm. Now, take the average of all farms, of all stocks, and of all periods of leases, and I value the capital employed at 4l. an acre, which I have reason to believe, from circumstances too numerous to detail here, to be a very moderate estimate.

on the capital employed, than on any other circumstance whatever; and that since ours is larger than that of France, though in the possession of 15 millions of people only (for that of France is to be connected with 25 or 26 millions), the British dominions ought to be essentially richer, and more powerful, than France; and while the two countries continue in their present situation, nothing can reverse this conclusion, but egregiously ill management in our own government. It is upon the firm basis of this momentous fact, that politicians ought to seek the solution of that apparent phenomenon, which the two last wars exhibited; the spectacle of England resisting, successfully, the whole power of France and Spain: and I will venture farther to assert, that those who seek the explanation in American colonies, or Indian conquests, seek it in causes of weakness, much more than of strength; and that the possession of near 300 millions sterling of active capital employed upon our lands, is of quite another importance than that of such distant and brittle dependencies, or than any advantage that our boasted foreign commerce ever gave us. When Mr. Paine* calculates, with pleasure, the superiority of France to England in *specie*, at seventy millions, upon data which, I shall shew in another place, have nothing more to do with the prosperity of the French than of the Hurons, he adverts to a policy which will be found a rotten one by every nation that relies on it, I mean, that of estimating gold and silver as national wealth; their rapid currency, indeed, implies prosperity—but that of paper does the same; and if paper has given to England a superiority of FOUR HUNDRED AND FIFTY MILLIONS STERLING in the solid and real wealth of stock in husbandry, she has not much reason to envy France a superiority of seventy millions in *specie*.

One great deviation of French capital has been in the sugar islands, which, according to the produce, cannot have a less capital employed in them than fifty millions sterling. The royal navy of France has been, and is now, a favourite object, chiefly for the sake of defending and securing these colonies; let us take but twenty-five years expence of the navy, at two millions sterling, and here are fifty other millions; in these two alone, without extending the supposition to many others that might be equally included, there are one hundred millions sterling, or two and a-half *milliards* of livres, which, under a different policy, might have been invested in agriculture; and had this taken place, the nation would have been in the receipt (counting only at 50 per cent. *produce* for the capital invested) of fifty millions sterling per annum more than she receives from her agriculture at present; or considerably more than 1,000,000,000 liv. Now what comparison can there be in the wealth, prosperity, power, or resources, between the import of five or six millions sterling in West-Indian commodities, and the production of ten times that amount in the native soil of France? Yet this

* *Rights of Man*, p. 155.

wretched commercial policy is now continuing; investments are still made in the West-Indies, because the nation expends two millions a-year on a navy to protect them; and it expends the two millions because the investments are thus made in the Indies; going eternally in this vicious circle; planting American wastes on account of the navy, and keeping up the navy because those wastes are planted; while her own agriculture wants 450 millions sterling in capital to be placed on an equality with England, which, from a similar policy, is not half improved to the perfection of which it is capable. What utter infatuation and blindness does such a conduct prove! And may we not fairly conclude, that the greatest favour which an enemy, or a friend, could do to France, would be the seizing of those colonies, and thereby stopping this miserable deviation of capital. Perhaps this remark may, with equal justice, be applied to England. Tippo Saib was mentioned to me in France as an object of serious alarm to our kingdom; much the contrary; if he drove us out of the Eastern Indies, and the negroes were to drive us out of the Western, they would be our best friends; for the capitals of the nation would then find the employment which they ought long ago to have found.

But I shall venture to carry this idea yet farther; it is not only the French capital employed in the sugar islands, and in the royal navy, that is a direct deviation from agriculture, for whatever is used in foreign commerce falls under the same predicament. The value of all the navigation of France, ships, stores, furniture, seamen, seamen's-wages, and all the exertions within land, in consequence of them, so much commended by numerous writers, must equally be considered as an employment of capital, much less profitable than that of agriculture. I do not contend that a state should neglect the proper means of its defence, and the advantages of a maritime situation; I maintain only, that the true progress of national industry is to stock fully the lands of a country, before any capitals are invested in other pursuits. It will be said (for the observation is common), that the investment of capitals in a nation must be left to the option of the individuals who possess them; but this objection is removed in a moment: the fact is granted; but the policy contended for is, that the state ought not, by laws and regulations, to tempt and bribe men to an investment of capital, contrary to the interests of agriculture; which Colbert did in so flagrant a manner, and which is yet done in every country of Europe with which I am acquainted, either by direct encouragements to the commercial system, or by laying burthens and taxes on land. The sole policy here insisted upon is that of freedom; let the state take no party, and agriculture, from its superior profit, will attract capitals, as long as an acre wants them; but when the state lays taxes upon the land, in any other way whatever than the consumption of its products, or carries proper taxes to an undue extent, or permits the cultivators to become

become the prey of a tythe-gatherer, or loads them with the total support of the poor, or, in fine, cramps the free sale of products, by prohibitions and monopolies; in all these cases, capital is as much driven from land as if an express law forbade the investment. It is not difficult to conjecture what turn this policy will take in France, when we see the preposterous and pernicious doctrines of the *économistes* triumphant; when the false and absurd doctrine, that all taxes ultimately fall on lands, is recognized and admitted; and when we know that a proposition for a direct land-tax of twelve millions sterling was received without abhorrence; such spectacles are not those of the *regeneration* of agriculture.

Upon the whole, the following conclusion may fairly be drawn:—as the old government of France, by all sorts of burthens and oppressions, kept down the agriculture of the kingdom, and as it were prohibited improvements, treading in the false and fallacious steps of Colbert, and encouraging exclusively manufactures and foreign commerce, it necessarily follows, that little credit can be given to the wisdom of the new legislature, which has arisen in that kingdom, unless different plans be adopted. To foster and promote agriculture in such a manner as to enable her to attract the capitals she has hitherto wanted, is an object not to be effected by sugar-islands, and is easily to be destroyed by such land-taxes as have lately been established by the National Assembly. It is not the division of farms, and holding commons sacred, that will enrich the stock of husbandry. The government of the kingdom, it is true, is regenerated; but the ideas of the people must also be regenerated upon these questions, before a system can be embraced, which, by giving capital to agriculture, shall carry France to such a prosperity as England has attained.

C H A P. XIV.

Of the Price of Provisions, Labour, &c.

WITHOUT knowing the price of these articles in different countries, the political arithmetician would want one of the principal bases to build and support many of his most useful calculations. The connection between the price of labour and of provisions; the effects of high or low prices on agriculture, and the re-action of culture on price; the manner by which high and low prices affect population, manufactures, and national prosperity,—these, and a thousand other inquiries in political œconomy, which so many writers have treated on the grounds of mere theory and reasoning, should be suspended till

till a sufficient mass of facts be collected, the examination and comparison of which can alone elucidate such intricate subjects. When the rates of labour, provisions, &c. are correctly known in countries governed upon different principles, and possessing very different quantities of the precious metals, and degrees of industry, the politician will have valuable data on which he may reason: to collect such ought to be one great object of those who travel with philosophical views, and who direct their attention to subjects of useful knowledge, instead of the common frivolous pursuits that waste the time and fortunes of so many.

Of the Price of Provisions.

Places.	Beef.	Mutton.	Veal.	Pork.	Butter.	Cheese.	Eggs the doz.	Bread.	Wine.
	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.
1787.									
Calais,	12	12	8		15				
Abbeville,	8	12	8	9	16	10	8		
Toury,					12				
Orleans,	7½	6	6	10				1½	8
Limoges,	6	5	9	6	13			2½	3½
Brive,									2½
Souillac,									4½
Montauban,	5½	8	8	9	30			2	3
St. Martory,	12	12	12					2	4
Perpignan,	5½	6½	7½	9					
Pinjan,	5½	6	9	7	15	10		2½	1½
Rodez in Rouverge,	4	4	4	3				2	2
Lodeve,	4½	7		6½				2	
Beg de Rieux,								2	1
Amous,	4	5	5	5				2	
Bagnere Bigore,	5	5	5	7				2½	3
Navarens,	4	4	5					2½	6
Bayonne,	6	7	7	6				2½	
Tartafs,	5½	5	5½					2½	6
Auch,	5½	6	4					1½	
Fleurance to Leitour								2	1½
Agen,	8	7½	8					3½	3½
Tonneins,								2½	
Bordeaux,	9½	7½	11½	15	60	12		3½	3
Caudec,	5	6	8					2½	5
Tours,	8	8	8	6	15			2	6
Chambord,	8	8	8					3	5
La Chapelle la Reine	8	8	8					3	5
Montgeron,	9½	8	10	10	19		10	2	10
Ermenonville,	10	10	10	10	21			2½	6
Dammartin,	10	10	10		20			2	

In winter mutton 21s.
In winter butter 21s.
Brandy 13s. the bottle.

Beef 17s. for the lb. of 48 oz. best fresh
butter 6s. a lump, and 4 to 6 lumps a lb.
white wine 3s. red 4s. for the poor 1½s.

Best bread 3s. oil 10s. the lb. the poor
eat much fromage de Roquefort, 16s.

Best oil 12s. the lb.

Mutton 15s. the lb. of 48 oz.
Beef 15s. the lb. of 48 oz.

Beef 18½s. for 45 oz.

Finest white bread 4s. good wine for the
table 11s. common white 4s. good white
11s. 5s. salt butter 20s.

Best bread 2½s. butter in winter 24 to 28s.

The best bread 3s.

Valenciennes.

Places.	Beef.	Mutton.	Veal.	Pork.	Butter.	Cheese.	Eggs the doz.	Bread.	Wine.	
	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	
Valenciennes,	9	9	9	—	16	8	11 $\frac{1}{2}$	3	—	Bread for the poor 2f. 9 den.
Lille,	8	8	8	10	14	14	13	2	—	
Dunkirk,	8	8	8	10	—	—	12	3	—	
1788.										
Calais,	8	8	8	10	14	7	6	2	—	For the poor.
Arras,	8	8	8	—	16	—	—	2	—	Ditto.
Rouen,	11	11	11	12	19	—	10	2 $\frac{1}{2}$	6	Cyder.
Yvetot,	9	9	9	12	18	—	—	2 $\frac{1}{2}$	—	Best breed, 3 $\frac{1}{2}$.
Havre,	11	11	7	11	—	8	—	2 $\frac{1}{2}$	2	Cyder.
Caen,	8 $\frac{1}{2}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	—	14	—	6	2 $\frac{1}{2}$	—	
Cherbourg,	9	9	—	12	—	—	—	2 $\frac{1}{2}$	—	
Doll,	8	8	8	—	—	—	—	2 $\frac{1}{2}$	—	
Rennes,	7 $\frac{1}{2}$	4	5	—	14	—	6	—	—	Buck wheat, 1 $\frac{1}{2}$ lb.
St. Brieux,	8	8	8	10	10	—	—	2 $\frac{1}{2}$	—	Salt butter, 10f. best <i>de provela</i> , 20 to 24f.
Landernau,	9	6 $\frac{1}{2}$	6 $\frac{1}{2}$	—	10	—	—	3	—	
Nantes,	8	8	8	10	14	11	10	3	8	
Angers,	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7	13	—	6	3	6	Milk 2f. the pint of Paris, or a quart
Gacé,	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	—	—	—	—	3 $\frac{1}{2}$	—	Eng. tallow 57 liv. 10f. the 100lb.
Elbœuf,	10	10	10	—	—	—	—	2 $\frac{1}{2}$	—	Bread for the poor 29f. the 12lb.
La Roche Guyone,	8 $\frac{1}{2}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	18	16	4	—	2 $\frac{1}{2}$	10	The poor meat in the country 8f.
1789.										
Nangis,	8	8	8	8	18	—	9	3 $\frac{1}{2}$	8	Wheat 48 and 49 liv. the septier (which is $\frac{1}{2}$ qu. Eng.) and troopers drawn up in the market to keep people in order.
La Perté,	—	—	—	—	—	—	—	4	—	Wheat 50 liv. the sept.
Chateau Thierry,	—	—	—	—	—	—	—	4	—	
Mareuil,	8	8	8	7	16	—	—	—	4	Wheat now (July) 7 to 8 liv. the measure of 40lb.; common price 3 liv.
St. Menchoud,	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	—	—	—	—	4	—	Bread for the poor 3f. 9 den. Wheat 4 liv. 10f. the boif. of 30lb.
Braban,	6	6	6	—	—	—	6	3 $\frac{1}{2}$	—	
Verdun,	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	—	—	—	8	3	—	
Mar le Tour,	6	6	6	—	—	—	—	3	—	Black bread.
Metz,	7	7	7	—	14	—	—	3 $\frac{1}{2}$	—	Black wheat 6 liv. 12f. the franchar of 40lb.
Pont a Mousson,	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	—	—	—	—	—	—	Bread for the poor 2f. 9 den.
Nancy,	7	7	7	—	14	—	—	3	—	The three meats are taxed at 6f. by the police; but none good to be got under 7 $\frac{1}{2}$ f.
Luneville,	7	7	7	—	13	—	—	4	—	Bread for the por 2f. 3 den.
Straßbourg,	6	6	6	—	—	—	—	—	—	Bread brown 2 $\frac{1}{2}$ f. Wheat 180lb. 33 liv.
Schelestadt,	6	6	6 $\frac{1}{2}$	—	—	—	—	—	—	last year 18 liv. and in common 12 liv.
Isenheim,	6	6	5 $\frac{1}{2}$	—	—	—	—	—	—	All beef from Franconia.
Befançon,	7 $\frac{1}{2}$	7 $\frac{1}{2}$	—	—	—	—	—	—	—	
Dole,	7	7	7	—	—	—	—	—	—	
Dijon,	8	8	8	—	15	—	—	5	—	For the poor bread 2 $\frac{1}{2}$ f. lowered by the police. Inferior meat 7 $\frac{1}{2}$ f.
Mont Ceniz,	7	7	7	—	—	—	—	2 $\frac{1}{2}$	—	Bread for the poor that price.
Luzy,	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	—	—	—	—	—	—	
Bourbon Lancy,	6	6 $\frac{1}{2}$	6	—	14	—	—	—	—	
Moulins,	6	6	6	—	10	—	16	—	—	

PRICE OF PROVISIONS.

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Places.	Beef.	Mutton.	Veal.	Pork.	Butter.	Cheese.	Eggs the doz.	Bread.	Wine.
	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.	Sols.
Riom,	6 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$				10	5	1
Clermont,	5 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$		13			4	
Izour,								3 $\frac{1}{2}$	
Briude,	5 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$					3 $\frac{1}{4}$	2
Le Puy,	5 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$					4	
Pradelles,	5	6	5				7		
Thuytz,								4	
Viviers,								3 $\frac{1}{2}$	
Loriol,	7	5	9		14				
Piere Latte,	8	8	8					5	
Avignon,	8	7	8		20		12	4	
Aix,	6 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$		18		12	3 $\frac{1}{4}$	3 $\frac{1}{2}$
Marseille,	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$		25			3 $\frac{1}{2}$	6
Estrelles,	4 $\frac{1}{2}$	6							
Lyons,	8	8	8		11	8		3 $\frac{1}{2}$	

Some bread 2s. 4 den. and 1s. 11 den.
New wheat, Aug. 8, 31 liv. 2s. the sept.
of Paris.

Brown bread 2s.

Common bread 3s.
Brown ditto 2 $\frac{1}{4}$ s.
Brown ditto 2 $\frac{1}{2}$ s.

RECAPITULATION.

	French money.	English money.		French money.	English money.
Beef, per lb. aver. of 76 minutes,	7s.	3 $\frac{1}{2}$ d.	Butter, average of 38 minutes,	16 $\frac{3}{4}$ s.	8 $\frac{1}{2}$ d.
Mutton, average of ditto,	7	3 $\frac{1}{2}$	Cheese, average of 10 ditto,	9	4 $\frac{1}{2}$
Veal, average of 72 ditto,	7 $\frac{1}{2}$	3 $\frac{1}{4}$	Eggs, average of 19 ditto,	9	4 $\frac{1}{2}$
Meat average of the three	7		Bread, average of 67 ditto,	3	1 $\frac{1}{2}$
Pork, average of 28 minutes,		4 $\frac{1}{2}$	Wine, per bottle, aver. of 32 do.	4 $\frac{1}{2}$	2 $\frac{1}{4}$

Twenty-three minutes concerning bread, having been made in 1789, when the price of wheat was extravagant, we certainly must not reckon the average price of such bread, as the bulk of what people eat in France, at more than 2s. the pound, or 1d. English.—It is to be remembered, that the pound, *poid de marc* of France, is to the English pound *avoir-du poids*, as 1,0000 is to 0,9264; it is therefore about $\frac{1}{11}$ heavier, a difference which must be kept in mind. In order to compare the prices of these commodities in the two kingdoms, some previous observations are necessary. Beef is, in many parts of France, exceedingly good and well fattened; better is not to be found any where than at Paris; and I have remarked, elsewhere, the great numbers of fine oxen fattened in Limosin in winter, and in Normandy in summer, for the Paris market. I think, therefore, that the beef of England, and of great cities in France, may very fairly be compared. It is not so generally good, perhaps, in the latter kingdom, but the difference does not demand attention.—It is, however, very discernible in little country towns, where nothing is killed but old cows—and good beef is as rare as good mutton; whereas there is not a spot in England, in which a private gentleman's family, that lives in the country, is not supplied with good ox beef.

Veal, notwithstanding that at Paris from Pontoise, is much inferior; but the great inferiority of French meat to English is in mutton, which is universally so bad in France, that I may assert, very correctly, that from one end of the kingdom to the other, I never saw a live or dead sheep that would in England be esteemed a fat one. In general, mutton is so lean, that, to an English palate, it is barely eatable. The French do not like very fat mutton, that is to say, they do not like much fat; but they must like the lean of fat meat, as being more juicy, and better flavoured, than that of lean. It is however to be remembered, that at common tables (I do not speak of those of great lords, for they do not form a nation) meat is usually so much roasted, that it is not an equal object to have it so fat as in England. But though the niceness of the palate is a matter of no importance, yet whether the mutton in general be lean or fat, is of very great consequence in these inquiries; for this circumstance may make that meat much dearer in France than it is in England. Upon an average in the latter kingdom, the price of meat, in 1790, as I found by numerous returns from many counties, was,—Beef, 4d. per lb.—Mutton, 4½d.—Veal, 4½d.—Average of the three 4¼d.—Pork, 4d.

I am of opinion, that the beef and veal are as cheap at these prices, if we consider the quality, as in France, for these minutes respect the best joints only. As to mutton, it is at least 20 per cent. cheaper; by which I wish to have it understood, that I allude to the superior expence which must be incurred by the grazier, in order to bring his mutton so fat to market, as is universal in England; or, in other words, that he would make a greater profit, by selling it at the French price, than at the English one, provided he were to make it no fatter than is usual in France. Whoever attentively considers the French husbandry, will not be surprized at the leanness of their mutton. The want of artificial grasses is so great, that sheep, though few in number, are miserably fed in summer; but as to winter, they are in most of the provinces fed upon straw, and what they can pick up on wastes and stubbles. There are few districts where you see any thing like a regular provision for them; in consequence of which, the markets are supplied in a very imperfect manner, and farms suffer dreadfully from want of the manuring, which a flock of hearty well fed sheep are sure to deposit. Bread in England may be reckoned at 1¼d. a pound; but we must not, therefore, conclude, that it is near double the French price; for the materials are not the same. In England, it is very generally made of wheat; and the poor, in many parts of the kingdom, eat the whitest and best; but in France, the bread minuted in the preceding notes, is often of rye and other grain; so that the price is not double for the *same* bread; though there is cent. per cent. variation in the price of the bread consumed by the poor of the two countries. Bread being so much cheaper in France, in comparison of meat,

than

than it is in England, occasions that great consumption of bread in France in preference to meat, which the French poor rarely eat. In England, the consumption of meat, by the labouring poor, is pretty considerable; for as bread approaches so much nearer to the price of meat in this kingdom, it necessarily occasions this difference between the two countries, which has been already remarked by Monf. Herrenschwandt with his usual acuteness. The consumption of cheese in England, by the poor, is immense. In France they eat none at all. The English consumption of meat is infinitely more beneficial to agriculture than the French consumption of bread: it is by means of great stocks of cattle and sheep, that lands are improved and rendered productive; the crops which support cattle and sheep are of an ameliorating nature; but those that yield bread are, on the contrary, exhausting. It must be therefore evident, that agriculture will be advanced in proportion to the quantity of meat, butter, and cheese consumed by any nation.

POULTRY—Average.—Fowl 22*s.* (11*d.*); turkey 68*s.* (2*s.* 10*d.*); duck 22*s.* (11*d.*); goose 50*s.* (2*s.* 1*d.*); pigeon 7*s.* (3½*d.*)

Observations.

It appears from these averages, that poultry is not generally so cheap in France as it has been represented; it is, however, cheaper than in England; for I cannot estimate the prices with us lower than, a fowl 1*s.* 6*d.*; a turkey 5*s.*; a duck 1*s.* 6*d.*; a goose 4*s.*; a pigeon 4*d.*

L A B O U R.

1787.—PICARDIE—*Abbeville*.—Men 12*s.* some 16*s.* to 20*s.*

ISLE OF FRANCE—*Eslampes*.—Men 20*s.* in winter 5*s.* and food; in summer with food 12*s.*

SOLOGNE—*La Ferté*.—Men 16*s.*

Salbris.—Servants wages on a farm 75 to 120 liv.

BERRY—*Verfan*.—Men 15*s.* in winter 8*s.* and food.

Argentan.—Men 20*s.* in winter 8*s.* and food.

LA MARCHE—*La Ville au Brun*.—Men 27*s.* in winter 10*s.* and food; if no food 16*s.* in general 20*s.*

LIMOSIN—*Uzarch*.—Men 14*s.*

QUERCY—*Brive*.—Men 19*s.*

Montauban.—Men 15*s.* in short days 12*s.*

LANGUEDOC—*Toulouse*.—Men 20*s.*

Bagnere de Luchon.—Men 20*s.* women 4*s.* and food.

ROUSSILLON—*Perpignan*.—Men 24*s.* or 15*s.* and food.

LANGUEDOC—*Beziers*.—Men 12*s.* in summer and food.

Pinjan.—Men 30*s.* if with food 12*s.* in winter 24*s.* if with food 10*s.*

3 L 2 *Sauve*.—

- Sauve.*—Men 27*s*.
Amous.—Men 15*s*.
 ROUVERGUE—Men 22*s*.
 GUIENNE—*Navareen.*—Men 10*s*.
Tartas.—Men 19*s*.
Fleurance.—Men 15*s*.
Port de Leyrac.—Men 12*s*. and food.
Tonneins.—Men 22*s*.
Bordeaux.—Men 30*s*.
 ANGOUMOIS—*Angoulême.*—Men 6½*s*. and food.
Ruffec.—Men 12*s*.
 POITOU—Men 12*s*. in 1777 8 to 10*s*.
 TOURAINE—*Tours.*—Men 10*s*. and food, the same in 1777.
 ISLE OF FRANCE—*Ermenonville.*—Men 20*s*.
 FLANDERS—*Cambray.*—Men 30*s*.
 1788—PICARDY—*Calais.*—Men 24*s*. in harvest 30*s*.
 NORMANDY—*Aumale.*—Men 24*s*. in harvest, in 1777, 15*s*.
Havre.—Men 30*s*.
Caen.—Men 22*s*. mason and carpenter 40*s*.
Harcourt.—Men 15*s*.
 BRETAGNE—*Doll.*—Men 4 to 6*s*. and food, in harvest 20*s*. but no food.
Rennes.—Men 16*s*.; for the year round the common pay 5*s*. and food; threshers no food, but 12*s*. or the 17th of the corn; for reaping and mowing 20*s*. and no board; wages of a carter 90 liv. boy 60 liv. maid 30 liv.
St. Brieux.—Men 25*s*.
Landernau.—Men 18*s*. with food 5 or 6*s*.
Musiliac.—Men 15*s*. a man, 2 oxen, and a cart, 4 liv.
Auvergnac.—Men 15*s*. women 5 or 6*s*. and food; mason and carpenter 25*s*.
Nantes.—Men 14*s*. in the town 24*s*. porters are paid by the job and earn 3 or 4 liv.; mason and carpenter 35*s*.
 ANJOU—*Angers.*—Men 10*s*. women 8*s*. mason and carpenter 20*s*.
Tourbilly.—The Marquis de Tourbilly paid 12*s*. a day in his improvements, which began in 1738.
Gacé.—Men 24*s*.
 NORMANDY—*Darnetal.*—Men 20*s*. ten or twelve years ago not much more than half that.
La Roche Guyon.—Men 20*s*. in winter 15*s*. in harvest 30*s*. mason and carpenter 35*s*.
 1789—ISLE OF FRANCE—*Nangis.*—Men in summer 24*s*. in winter 15 to 18*s*.
 Men

Men in harvest 30*f.* women in summer 15*f.*

Cutting wheat 7 to 9 liv. per arp.

——— barley and oats 30*f.*

——— meadow 3 liv. if fed the half.

Wages of a carter 8 louis, a boy 4 ls.

A dairy maid 4 ls. other maids 3 or 3½ ls.

To load and pitch hay and corn through the season 5 ls. or 3 ls. if fed.

Sowing 10*f.* an arp.

CHAMPAGNE—*Marcuil*.—Men 25*f.*; in winter 12*f.*; wages of a carter 150 liv.

LORRAINE—*Braban*.—Women in hay time 6*f.* and food.

Men in ditto 12*f.*

——— mowing 30 to 40*f.* a day and no food, but 2 or 3 bottles of wine.

For threshing the 18th or 19th part of the corn.

Metz.—In winter 15*f.* and no food.

— summer 18 and 20*f.* ditto.

General employment in manufactures, public works, &c. 18 to 20*f.*

A mason to 24*f.*

Pont au Mousson.—A mower 20 to 30*f.* and food.

Haymaker 12*f.* and food.

Harvest $\frac{3}{4}$ de bichet per diem for cutting and binding.

Mowing oats 20*f.* and food.

Nancy.—In winter 20*f.* no food.

A better sort in towns 30*f.*

In summer 25*f.* and no food.

ALSACE—*Sewern*.—In winter 16*f.* in summer 20*f.* no food.

Straßbourg.—In summer 20 to 24*f.* in winter 16*f.*

Schelestadt.—All the year 20*f.* or 12 and food.

FRANCHE COMPTE—*Bejançon*.—20 to 30*f.* and food; in summer 10*f.* and food in winter.

BOURGOGNE—*Dijon*.—In summer 24*f.* in winter 20*f.* and in winter in some country places 15*f.* no food; carpenter 35, 36*f.* mason 30*f.*

Mont Cenis.—24*f.* a-day.

BOURBONNOIS—*Moulins*.—All the year 15*f.* no food except harvest, then food; by filk 20 to 24*f.*; women 8 to 12*f.*; carpenter and mason 25*f.* and no food; hire of a man and four oxen a day of eight hours 3 liv.

AUVERGNE—*Riom*.—Summer 20 to 24*f.* in winter 10 to 15*f.* no food.

Izair.—Summer 24 to 30*f.* and four pints of wine; in winter 12 to 14*f.* and three pints of wine.

Briude.—

Briude.—In winter 14 to 16*s.*; in summer 24 to 36*s.*

VIVARAIS—Thuytz.—In winter 18*s.* in summer 20*s.*

Viviers.—In summer 20*s.* in winter 18*s.* master carpenter 40*s.* the man 20 to 30*s.* mason 30*s.*

DAUPHINE—Loriol.—In summer 30*s.* in winter 20*s.*; cutting, harvesting, and threshing the corn $\frac{1}{3}$ of the crop of all sorts; workmen for all the year 15*s.* if employed in harvest.

Montilimart.—In summer 36*s.* in winter 20*s.*

PROVENCE—Avignon.—In summer 26 to 30*s.* in winter 20*s.*

Tour d'Aigues.—Now 24*s.* a day, in winter 15*s.* about twenty years past 16*s.* cutting and binding 10 liv. the somma, threshing 15 liv. (50,400 ft. 10 liv. is 5*s.* 3*d.* Eng. ac. 15 liv. 7*s.* 10 den.

Marseille.—A ship carpenter 3 liv. *califat*, he who bores and drives, 3 to 4 liv. mason 50 to 60*s.* common labour 40 to 60*s.*

Estrelles.—In summer 30*s.* in harvest up to 3 liv. on a pinch, and even 4 liv.; in winter 24*s.*

Average earnings of men throughout the kingdom 19*s.*; mason and carpenter 30*s.* There are but few minutes concerning the rise of the price of labour; in Normandy it has been doubled in twelve years; in Provence it has risen from sixteen to twenty-four; but in Anjou it remains as it was fifty years ago. The idea I had of the general price of labour in France, taken about twenty or twenty-five years ago, which I acquired from reading and from information, was the average of 16*s.* a day. If that idea were at all correct, labour has risen about 20 per cent. But though the price is now satisfactorily ascertained, I do not know that it was ever so before, and the general ideas to which I allude might be very erroneous. I take the fact not to be far from the rise of 20 per cent. on the average, but to have been much more so in the provinces where there is some activity of commerce and manufactures; and no increase at all, or at least very little, in those which do not enjoy these advantages.

The average price of labour in England twenty years ago, when I made my tours, was 7*s.* 6*d.* a week, or 1*s.* 3*d.* a day; the price at present I should state at 8*s.* 5*d.** a week, or 1*s.* 4½*d.* a day; but this idea is not founded on an actual survey. Indeed it is much to be wished that England were again travelled through, with the views that I examined it twenty years ago, that its progression might be well ascertained; such a knowledge is useful to every man who would

* Calculated thus, five weeks at 12*s.* a week; four at 9*s.*; and forty-three at 8*s.*; in all 22*l.*; but no estimate by the week will shew the real earnings of our labourers, who perform so much work by the piece, that they earn much more than any weekly rate can point out.

really understand the state of his country; so useful, that it ought to be done at the expence, not of government, but of parliament, independently of ministers, if possible, whose interest it is always to represent the country as flourishing; for most of them assume a merit from the prosperous condition of the kingdom, though perhaps not indebted to them for one atom of its amount: but whatever evils befall a nation, are, for the most part, to be charged to the account of government alone.

Labour in France,	- 19s.	{	Meat,	-	7s.
			Bread,	-	2
Labour in England,	- 33½s.	{	Meat,	-	8½
			Bread,	-	3½

If meat and bread be combined into one price, it follows, that labour in England, when proportioned to labour in France, should be at 25½s. a day, instead of 33½s. If bread alone be taken, there is almost the same proportion; that is, 19 at 2 are the same as 33½ at 3½; but this coincidence, perhaps, is accidental; because in England the rate of labour, supposing it to depend on provisions, would certainly depend, not on bread only, but on an aggregate of bread, cheese, and meat; however, one would wish to see these naked facts ascertained, whatever conclusions may be drawn from them. The consumption* of bread, and the price of labour being about 76 per cent. cheaper in France than in England, is an enormous deduction from what may, with propriety, be called the mass of national prosperity in the former kingdom. This opinion, however, I venture to maintain against a cloud of writers and politicians, who strenuously contend for cheap provisions and cheap labour, in order to have cheap, and consequently flourishing, manufactures; but the example of England, which has outstripped the whole world in this circumstance, ought long ago to have driven such sentiments from every mind. Country-labour being 76 per cent. cheaper in France than in England, it may be inferred, that all those classes which depend on labour, and are the most numerous in society, are 76 per cent. less at their ease (if I may use these expressions), worse fed, worse clothed, and worse supported, both in sickness and in health, than the same classes in England, notwithstanding the immense quantity of precious metals, and the imposing appearance of wealth in France. And if the labouring poor consume 76 per cent. less than the poor in our kingdom, they consequently afford, in the same ratio, a worse market to the farmer; whence agriculture suffers in the same proportion, and ought to be found, by this combination, at least 76 per cent. worse than the agriculture of England. Every country contains a certain portion of the precious metals, or of some other currency that answers the same pur-

* I say the *consumption*, and not the *price*, because the kinds of bread in the two kingdoms are not the same: there is no such difference as this in the price of wheat; I apprehend no difference at all.

pose; and the difference between a high and a low price of labour and provisions is, that in one country a large proportion of those metals is in the hands of farmers and labourers; and in the other a small one only. In one case great activity and vigour will be found in husbandry; in the other very little. But this argument may be extended yet farther; for if there be 76 per cent. difference in the consumption of the French and English labourers, there ought to be 76 per cent. difference in the strength of body between the two nations. Strength depends on nourishment; and if this difference be admitted, an English workman ought to be able to do half as much work again as a Frenchman,—this also will I believe be found to be correctly the case; and if the great superiority, not only of the English husbandry, but also of those manufactures into which machines do not enter any more than in France, be well considered, this extension of these proportions will not be thought at all extravagant. To what is all this to be ascribed? Most clearly to the pernicious influence of a government, rotten in its principles; that struck a palsy into all the lower and productive classes to favour those whose only merit is consumption. If some future traveller should examine France with the same attention I have done, he will probably find, under a free government, all these proportions greatly changed; and, unless the English government be more vigilant and intelligent than it hath hitherto been, France will be able to boast as great a superiority as England does at present.*

Of some Circumstances concerning the Poor.

SOLOGNE—*La Motte Beuvron*.—Poor labourers make bread of buck-wheat, but it is very bad.

BERRY—*Argentan*.—They pay rent for a cottage 20 liv. get their fuel in the woods; their tailles 15 to 24*s.* as much for capitation, and do six days labour in the roads.

LIMOSIN—*Limoges*.—Lodging of a common artizan or manufacturer 15 liv. a year; druggits for their dress 24*s.* the auln; very few wear leather shoes, common labourers throughout the province very few, the metayers working as much as possible for themselves.

St. George.—They eat buck wheat made in very thin cakes without leaven.

QUERCY—*Payrac*.—All the women and girls are without shoes or stockings, and the ploughmen at their work without shoes or sabots, or feet to their stockings.

Pellecoy.—Poor women picking weeds into their aprons to feed their cows with, and something like this I have remarked more or less all the way from Calais; it conveys an idea of poverty and want of employment.

* I leave the passage as written; events have shewn, that the *idea* of a free government has produced the reality of a devouring tyranny.

LANGUEDOC—*Griffoles*.—Cottages without glafs, and fome with no other light than what enters at the door.

Touloufe.—A year's earnings about 300 liv. 13l. 2s. 6d. meet women coming from market with their fhoes in their baskets; it reminds me of Ireland.

To Bagnere de Luchon.—Live upon buck-wheat, either made into bread or boiled in milk.

Narbonne.—A field full of gleaners. Most of the women in this country are without ftockings, and many of them without fhoes.

Pinjan.—The labourers here work very hard, three men have been known to mattock up as much land in a day, as one man and a pair of oxen ploughs, but they live well; when they work hard have always three bottles a day of good wine; I tafte and found it ftrong and full bodied, and by turning to the table of labour it will be feen that the price is high.

GUIENNE—*Leyrac*.—They are in this rich country on the Garonne very much at their eafe, make four meals a day, eat meat and drink wine.

POITOU—*Verac*.—A man makes four pair of fabots a day, is paid 3*f.* a pair, they laft from two weeks to fix months, coft 10*f.* to 15*f.*

TOURAIN—*Tours*.—Rent of two chambers for a workman 24 liv.

PICARDY—*Calais*.—A cellar is not to be hired under 100 liv. a year.

Rouen.—The pooreft cellar 80 liv. one room 120 liv. a poor man's houfe 300 liv.

NORMANDY—*Yvetot*.—Very poor houfe for 100 liv.

Havre.—The pooreft room or cellar 60 liv.; when cyder is to be had it is ufually 2*f.* the bottle, but when it fails they drink water, and as cyder a moft uncertain crop in Normandy as well as in England, we may judge how much more beneficial a dependance on beer is; the breakfast of the poor here is bread and brandy; bread and cheefe at 8*f.* the lb. for dinner; and for fupper a piece of bread and an apple; but on Sunday a piece of meat of the worft joints at 6*f.* the lb.

Falaise.—Live very badly, much of the bread is barley and buck-wheat, and many have nothing elfe but this and water, unlefs cyder happens to be very cheap; their fuel what wood they can ftal.

Caen.—Houfe-rent 80 liv. to 100 liv. in the country 30 liv. to 50 liv.

igny.—Sheep from two to fix with their fore-legs tied together by a line, led by a woman, with many fo, feeding in the fields; I clafs this article here, as I cannot conceive any fuch management to belong to the graziers, but the poor people who attend them in the road and pay for them in the fields.

BRETAGNE—*Pent Orfin to Doll*.—The poor peole live upon buck-wheat bread, or made into thin cakes, which fell at 1½*f.* the lb. while common bread is

2½*f.* they also eat it mixed into pottage; no potatoes in the country, as the people will not touch them.

Morlaix to Brest.—The people of the country are all dressed in great trowser like breeches, many of them with naked legs and most with wooden shoes; the women seemed from their persons and features to be harder worked than horses.

Aury to Vannes.—Pass many cabins almost as bad as the worst Irish, a hole at the corner, by way of chimney, and no windows.

Nantes.—The cheapest room 40 liv. a year.

ANJOU—*Angers.*—The poorest house to be had entire is 12 louis a year.

Elbæuf.—In the country, house rent 40 to 45 liv. but more in town.

La Roche Guyon.—House-rent 20 to 40 liv. but in general fixed at a few sols a year, most are hewn out of the chalk rock; potatoes 8*f.* the boif. 8th. of a septier; apples 1 and 2*f.* ditto; this year cyder 12 liv. the muid, 4 liv. without cask; milk 4*f.* the P. pint; the cows, horses, and asses of the poor taken into the duchess's meadows from the 1st of Oct. to the 1st. of March, at 5*f.* each.

ISLE OF FRANCE—*Nangis.*—Milk 2½*f.* the Paris pint; house-rent 2 louis, all have cows, which they feed on roads and commons; Mons. de Guerchy finds them cows at 6 liv. each, and half the calf.

LORRAINE—*Pont a Mousson.*—Some few of the poor are without a cow, but in general not; many are proprietors of their house and gardens; rent in a village 30 liv. for a house, 50 liv. with a garden, but without any other land.

AUVERGNE—*Clermont.*—In the mountains rent 12 liv. without land.

DAUPHINE—*Loriol.*—Potatoes 40*f.* the 100 lb.

PROVENCE—*Tour d'Aigues.*—The poor are in far better circumstances in the mountains than in the plains; here they are miserable, eat only rye bread quite black and onions; all the foundations and collections for the poor at Aix amount to 150,000 liv. a year.

Lyons.—A room for a manufacturer 200 to 300 liv. and house-rent of all sorts very dear; 20,000 people are now (1790) starving, yet charities of all sorts do not amount to less than million of livres a year. A Philanthropic Society has subscribed 10,000 louis d'or for supporting the poor; three years ago 150,000 liv. were subscribed in order to provide beds enough in the hospital to have all the poor lye single, and soon after 400,000 liv. to support the poor out of employment, because the crop of silk failed, and last year 250,000 liv. more for the same reason.

It was not long after the seizure of the ecclesiastical estates, that the National Assembly publicly declared, they would consider the care of the poor as one of their primary duties. They appointed also a committee of *mendicité*, whose business was to inquire into, and report to the Assembly, the state of the poor, and

and their opinion of the best means of extinguishing indigence in France. Of this committee the Duke of Liancourt was chairman. In their third report, they state to the Assembly the heads of those propositions which they thought necessary to form the base of a decree for that purpose. The committee examine, in this report, the idea of establishing a poor's rate, and with great wisdom absolutely reject it. In their fourth report, they state the mischiefs of the English system—and add, “ Mais cet exemple est un grand & important leçon pour nous: car, indépendamment des vices qu'elle nous presente, & d'une dépense monstrueuse, & d'un encouragement nécessaire à la fainéantise, elle nous decouvre la plaie politique de l'Angleterre la plus dévorante, qu'il est également dangereux pour sa tranquillité & son bonheur de détruire ou de laisser subsister*.—I am rather surprised, that while they seem perfectly well informed of the evils attending the mischievous system of England, they should adopt the principle of our poor's laws, by declaring, that the poor have a right to pecuniary assistance from the state; that the National Assembly ought to consider such provision as one of its first and most sacred duties; and that an expence, with this view, ought to be incurred to the amount of 50 millions a year. I do not comprehend how it is possible to regard the expenditure of 50 millions as a sacred duty, and not extend that 50 to 100, if necessity should demand it—the 100 to 200—the 200 to 300—and so on in the same miserable progression, that has taken place in England. We have found, by long experience in England, that the more money is expended, even well and humanely expended, the more poor are created; and that the degree of indigence and misery is exactly in proportion to the assistance given to them by rates. The same effect would certainly take place in France; the expenditure of 50 millions would inevitably make 100 necessary. It is in vain to say, that of that 50 there are 30 already expended by hospitals, and six † by the clergy; for the committee themselves give such a detail of the horrors of the hospitals, that a dependence on such charity will not be among the regular resources of the poor; and as to the ecclesiastical assistance, no families could rely on it as a matter of appropriated right. The case would be very different, if the National Assembly were solemnly to declare it their duty to provide for the poor, and assign 50 millions for that purpose; there would then be an universal reliance on that duty, and that humanity, of the legislature; and the consequence we know by fatal experience. I cannot but be persuaded, that the poor ought to be left to private charity, as they are in Scotland and in Ireland, to an infinitely better effect than results from the rates in England. In proportion as the public interferes, private charity is wounded, till the maintenance of the poor comes to be considered as one of the most grievous evils to which property is exposed.

* *Quatrième Rapport du Comité de Mendicité.* 8vo. 1790. p. 7. † *Cinquième Rapport,* p. 21.

If fifty millions could be expended in France without creating a dependence, the burthen would be very moderate; but we are convinced of the utter impossibility of such a case; we know that the wisest dispensation of money amongst the poor, not earned by industry, always creates a dependence, and consequently becomes, in such a proportion, the origin of the evil that is cured. For the like reason, hospitals, *if well administered*, are equal nuisances; they are attended by a similar effect, and the more that effect is lessened by a vicious and cruel management, so much, perhaps, the better for the benefit of the great mass of poor, who will not be tempted into a reliance on an abode of misery, despair, and death. The expenditure of the poor's rates of England is certainly not free from abuses, but they are, all things considered, less than might reasonably be expected. They amount to above two millions sterling, and I am confident, from a long and attentive observation of their effects upon the poor, that the mass of human wretchedness is quadrupled by their influence; or, in other words, that for one person made easy, at the expence of the public, four are rendered poor or miserable, by depending on that expence, instead of the exertions of private industry; and when it is considered, that on a moderate average the amount of our poor's rates increases in the proportion of near 100,000l. a year, of course approaching rapidly towards three millions, and at the same time curing no evils that they have not created, what ought to be thought of the political œconomy of our government, which, intent upon trifles, neglects this growing and alarming evil? Had an act passed ten years ago, limiting these assessments to the average of the last seven years (a measure I urged in print for more than ten years past), it would have saved half a million a year in expenditure, and four times that amount in the prevention of poverty and distress. What has fatally obtained in England will take place in France, if the English *principle* be adopted, namely, that the state is compelled in duty to support the poor; fifty millions will be the forerunner of one hundred, and both of them the parent of increasing misery. It is not the state, but individuals that are bound; and private charity is indisputably the proper method. Foundling hospitals may be classed among the most mischievous institutions that can be established; for they must certainly encourage that vicious procreation, which, from its misery, does not deserve the name of population. From the almost indiscriminate destruction of the children they receive, which in France is so enormous, that of 101,000 in sixteen years, 15,000 only were in existence*, it might by some be thought, that they do not tend to increase the people; but the preservation of the children, supposing them to effect it, would not be the principal operation. Such hospitals encourage marriage, from the certainty that the children need not to remain a burthen upon the parents; but when the conflict comes in the mo-

Rapport fait au nous du Comité de Mendicité des visites faites dans divers Hôpitaux, 8vo. 1790. p. 27.
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ther's bosom, the feelings of nature will oftener triumph than the dictates of so infamous a crime as that of abandoning her offspring; and thus more children will be preserved than exposed. A government cannot, by any methods, encourage marriage without increasing the people; for whatever tends to facilitate the maintenance of children, whether by an increase of industry, that shall enable children to support themselves, or by foundling hospitals, that remove the burthen altogether, the effect in the end will be inevitable. And this effect in France is of a most pernicious nature; for the competition for employment being already too great to permit the people to live with comfort, no institutions to encourage population can take place there at present without entailing misery upon the bulk of the nation. It may also be added, that the encouragement afforded by foundling hospitals, is an encouragement also of vice and inhumanity; and a public premium given to the banishment of the best feelings of the human bosom.

Rise of Prices.

SOLOGNE—*La Ferté*.—Cattle of all kinds increased in price more than a third in one year. A cow from 48 liv. to 90 liv.; a horse 7 or 8 louis to 12½; a hog 15 liv. to 30 liv. It has been owing to a want of forage.

BERRY—*Vatan*.—See two good cart-horses, which were sold this year for 20 louis each; and several farmers asserted, that a horse which three years ago was worth 5 louis, would now bring 12.

LIMOSIN—*Limoges*.—The same quantity of cord wood, which was sold 15 years ago at 50 liv. now sells at 150 liv. Land greatly raised in its value, and husbandry doubly more productive than 20 years ago.

LANGUEDOC—*Bagnere de Luchon*.—The measure of land, called the coperade, which some years since sold at 12 liv. is now at 24 liv. and even 30 liv.

Bayonne.—Within ten years, prices of every thing, including house-rent, very much increased.

Bordeaux.—Very great increase in the price of every thing in ten years.

ISLE OF FRANCE—*Liancourt*.—Within ten years, the general expences of living, bread alone excepted, have risen 50 per cent. and labour nearly in the same proportion.

NORMANDY—*Havre*.—A house, in 1779, let without any fine, on a lease of six years, for 240 liv. per annum, was let this year again for three years, with a fine of 25 louis for 600 liv. per annum. A cellar which is now 60 liv. was 24 liv. 12 years past.

BRETAGNE—*Rennes*.—Cord of wood 16 liv. In 1740, it was 9½ liv.

CHAMPAGNE—*St. Menchoud*.—Cord of wood 18 liv. 10s.—but 25 years ago 7 liv. 10s.

LORRAINE—

LORRAINE—*Pont au Mousson*.—The prices of all the necessaries of life risen one-third in twenty years.

Luneville.—Cord of wood now 26 liv. was fifty-two years ago 9 liv.

Straßbourg.—Cord of wood 27 liv. which, twenty years ago, was 12 to 15 liv.

FRANCHE COMPTE.—Those estates, which twenty years ago sold at 300 liv. now are 800 liv.

Besançon—Dole.—Meat now 7*s*. the pound—some years ago 4*s*.—A couple of fowls 24*s*. which were 12*s*.—In general every thing is doubled in price in ten years. *To what is this to be ascribed?*—To the great increase of population. Such was the answer I received; there is, however, no manufacture in the country, iron forges excepted.

BOURGOGNE—*Dijon*.—Every thing raised in 20 years cent. per cent. partly on account of the improvement of roads.

Observations.

There is scarcely any circumstance in the political œconomy of France which makes so respectable a figure as that of the general rise of prices, which has taken place in the last twenty years. This is a sure sign that the mass of currency has considerably increased, which, in the case of that kingdom, must necessarily have arisen from an increase of industry. We know that taxes cannot have been the cause, as they have not in the same period been increased; or, at least, to so small an amount as to be irrelative to the question. The most remarkable circumstance attending this *apparent* prosperity (for this circumstance is usually concomitant with prosperity, though not of necessity flowing from it) is the still miserable state of the labouring poor; it is rather a matter of surprise, that the price of labour has not risen equally, or in some degree of proportion, with other things; this must probably be attributed to the too great populousness of the kingdom, of which I shall speak more particularly in another chapter. Certain it is, that the misery which we see amongst the lower classes in France seems quite inconsistent with a great rise in the price of commodities, occasioned by an increase of industry and wealth; and as the price of labour continues so low as not to enable the people to support themselves tolerably, notwithstanding the rise of other prices, it affords a clear proof, as it has been just observed, that there is too great a competition for employment, arising from the excess of population in the kingdom.

C H A P. XV.

Of the Produce of France.

THIS may properly be considered as the great question of political œconomy, in relation to the present state of kingdoms; there being no circumstance in the situation of any people, whether it concerns their wealth, prosperity, power, or resources, but what must depend, in a high degree, on the produce of their lands. As it is a subject which becomes every day more interesting on account of the abuses generated by the complex system of modern taxation, it has naturally put politicians upon comparing the productions of a kingdom, and the contributions of the people, with the necessities, or rather vices, of their government. It is well known, that this proportion was sought for with the most anxious solicitude by the *œconomists*. They conceived, that *produce* ought alone to bear all the impositions which the government of any kingdom should lay upon its subjects; a doctrine equally ill-founded and dangerous, but which has been dressed and decorated with so much ability as to have found advocates in every part of Europe. The conjectures which have been made of the gross produce of all the lands in France, are innumerable. There has been scarcely a political writer on the affairs of that kingdom, for the last twenty years, who has not taken an opportunity, perhaps ill-afforded by his subject, to calculate the amount; but all the accounts that I have seen have been made on such insufficient data, that it is uninteresting whether the imagined result happens to be near to, or far from, the fact; since of so many random guesses it is hardly possible that all should be remote from truth. Of the methods used in calculating the national produce by various French writers, two have been principally relied upon; the produce of certain taxes, particularly the *vingtiemes*, and the quantity of food eaten by the people. More vague foundations could hardly have been sought or devised; the taxes were laid with so little regard to a fair proportion, the exemptions were so numerous, and abuses so universal, that the position of the stars might almost as well be resorted to as a political guide. The consumption of bread is almost equally unsatisfactory in a kingdom, where wheaten bread is not probably eaten by half the people; and where chefnuts, maiz, harricots, and other legumes, form principal objects of consumption. But if this difficulty were gotten over, in which there are no data that deserve a moment's attention, we must also take into the account the consumption of the earth's products, in meat, butter, cheese, liquors, fuel, timber, and all the variety of objects that administer to, or are consumed by, manufactures, commerce, and

and shipping. However, though we have every reason imaginable to believe, that such data are absolutely insufficient for calculating the produce of a kingdom like France, yet justice ought to be done to the authors who have given attention to a subject of so much utility. Accuracy was not to be attained by pursuing any methods; but it must be confessed, that those which they adopted, though not applicable to the ends they had in view, gave rise to important disquisitions; and we owe to their labours some facts truly useful, and many observations deserving attention. The extreme difficulty of forming the calculation in a satisfactory manner, appears clearly from the attempts that have been made by ministers at the head of the national finances, and consequently possessed of every opportunity which power could confer, to acquire whatever knowledge they sought; yet the ideas have been as vague and unsatisfactory as those of speculatists, who have been devoid of such advantages. It should seem, that it is not in the bureau or the closet, that data for this calculation are to be sought; but that he who would know what the lands of a kingdom produce, should view and examine them. It would be madness in a traveller like myself to pretend that it is possible to give a true estimate of the productions of a kingdom from viewing but a part of it: I know the difficulties and hazard of the undertaking too well to have any such pretensions; and all I would assume, is nothing more than the probability that my estimate of the part I saw is not greatly removed from fact. Thirty years experience, I hope, have contributed to enable me to form more than a vague conjecture of the products of any country that I view with attention; and when it is considered, that my journies, in almost every direction, amount to several thousands of miles, there will not appear to be any great hazard in supposing, that the average of such a portion, corrected on reflection and from information relative to the parts not seen, cannot be very far distant from the real one of the whole kingdom.

To pursue this inquiry, I shall divide France not into generalities, which have no longer any existence, nor into departments, which are yet hardly in existence, but into districts relatively to their soil, according to the map which is annexed to the chapter of soils.—The method by which I made the estimate is this: in viewing the country, I combined those circumstances which strike the eye in regard to soil, crops, proportion of those crops of vines, of wood, and waste, with the courses and the products of all sorts by information; and from the whole deduced the conclusion of what I conceived was the annual produce; and at each stage, or resting-place, struck the average of the preceding ten, fifteen, or twenty miles, which were afterwards, in some instances, thrown into divisions, by calculating the average of larger districts of country. I give, in another chapter, the produce of corn, and price per acre at which the cultivated parts of the districts I travelled through are let and sold; but the reader will

will carry in his mind, that the present view of the produce of the kingdom has nothing in common with what is just mentioned; for the object here in contemplation is, the average product of all sorts of land, heath, rock, marsh, and mountain, as well as cultivated fields; tracks of which it is in vain to demand the produce, since not one inhabitant in a thousand ever thought of them with any such view: in countries where agriculture is so ill understood, and where the peasants are so little enlightened, a traveller will come out of a province as ignorant as he entered it, if he has no other means of information.

NORTHERN DISTRICT OF RICH LOAM.

Contains the Provinces of Flanders, Artois, Picardy, Normandy, and the Isle of France.

Produce per			Produce per			Produce per		
Vicinity.	Miles.	Eng. acre.	Vicinity.	Miles.	Eng. acre.	Vicinity.	Miles.	Eng. acre.
To Amiens,	95	39s.	Pontoise,	30	39s.	Dunkirk,	18	70s.
Clermont,	40	43	Dammartin,	22	60	Calais,	25	22
To Orleans,	70	46	Villescoterets,	26	55	St. Omers,	25	45
Petiviers,	25	49	Coucy,	24	54	Bethune,	25	80
Malherbs,	11	52	St. Quentin,	30	43	Arafs,	17	45
Fontainebleau,	17	47	Cambray,	22	43	Dourlens,	20	45
The Forest,	7	0	Valenciennes,	18	43	Amiens,	17	45
Yerfaint,	10	43	Orchies,	16	120	Poix,	15	36
Paris,	20	52	Lille,	16	100	Aumale,	10	45
Liancourt,	38	52	Mont Cassel,	30	90	Neufchatel,	15	45

Produce.			Produce.			Produce.		
Vicinity.	Miles.	Produce.	Vicinity.	Miles.	Produce.	Vicinity.	Miles.	Produce.
Rouen,	25	60s.	Carentan,	22	80s.	Magny,	15	50s.
Barentin,	20	50	Vologne,	17	70	Eccouis,	15	60
Yvetot,	11	60	Gacé,	10	60	Rouen,	20	60
Havre,	30	60	Bernay,	25	32	Tote,	17	50
Pontau de Mer,	20	60	Bonterode,	17	80	Dieppe,	17	53
Pont l'Aveque,	20	70	Elbœuf,	7	60	Nangis,	45	53
Lisieux,	6	80	Rouen,	10	16	Meux,	23	40
Caen,	27	75	Lonviers,	17	30	Ditto,	10	80
Bayeux,	15	50	Vernon,	15	55			

Miles, 1220.—Average produce, 2l. 13s. 9½d.

There is not the same difficulty in calculating the produce of this track of rich land, as in some other provinces, where the soil is much more various.—Bad husbandry and fallows occasion a much greater deduction here, than inferiority of soil. No particular reasons induce me at present to lower this estimate, except, perhaps, the forests of Chantilly and Villescoterets, may not have been crossed in such directions as to allow sufficient deductions; but of this I am in doubt. Considering, however, the number of forests which are within these limits, which I did not pass, I am inclined to make the further allowance of 3s. 9½d. and set down this average product at 2l. 10s.

P R O D U C E.

Plain of Alsace.

	Miles.	Produce.		Miles.	Produce.
Straßbourg,	22	70s.	Colmar,	12	50s.
Schelestadt,	25	60	Ilenheim,	25	45
Miles, 84.—Average produce, 2l. 16s. 8½d.					

Much of this district is not so rich as a great part of the former; but the soil within these limits more equal—and of course not such deductions on account of forest.

The Limagne.

Riom to Izoire. Miles, 20.—Average produce, 5l.

This celebrated volcanic vale is very narrow; and in this estimate nothing is included but the mere vale: if the slopes were to be included, the produce would not be more than 45s.

Plain of the Garonne.

	Miles.	Produce.		Miles.	Produce.		Miles.	Produce.
In Quercy,	90	60s.	Leitour,	5	60s.	Tonneins,	8	12s.
To Pyrenees,	103	50	Leyrac,	17	80	Reolle,	22	100
Fleuran,	14	50	Aguillon,	17	85	Bordeaux,	15	60
Miles, 291.—Average produce, 3l. 3s. 3½d.								

As this route carried us very much on the banks of the Garonne, one of the richest vales in the world, though not wide, I am not inclined to rise this estimate on account of the immense vineyards of the Pays de Medoc, &c. which should be done, if I had not pretty much extended the district, as may be seen on the map. Not having visited the Bas Poitou, another rich track, which may be classed with the above mentioned, I am unable to give any other estimate than I was favoured with by an intelligent gentleman, who apparently knew it very well; he assured me, that the most exact calculation of its produce was 50 liv. per arpent de Paris:—this is 2l. 10s. 9d. per English acre.

Observations.

In these parts of France, which are undoubtedly the richest, the produce is very much beneath what it would become with a more enlightened practice.—Flanders, part of Artois, Alsace, the vale of the Garonne, and the Limagne of Auvergne, are the only districts of the kingdom where fallows are banished; and the great products of those territories shew the prodigious consequence of this improvement. They form, however, but a small portion of the division of the kingdom which we are considering at present; the arable part of the rest is uniformly applied in the barbarous course of, 1, fallow; 2, wheat; 3, spring corn; the products are consequently much inferior to what they ought to be; and the number of horses much greater. Considerable tracks are in open fields, and shackled

shackled with the rights of commonage, and prescribed rotations. As the National Assembly has passed a decree against inclosures, and there are no such methods known in France to effect the allotment of open fields, as we practise so beneficially in England; and as power in that country, under the new constitution, resides very much in the people, we may take for granted, that such methods will either not be adopted at all, which is the most probable, or at least very slowly and incompletely.—In whatever manner the improvement is introduced, and by whatever preparatory steps, it is certain, that the management of these districts must be very much changed, before they can be made to yield a produce adequate to the great excellency of the soil.

DISTRICT OF HEATH.

Contains the Provinces of Bretagne, Anjou, Parts of Normandy, and Guienne and Gascoigne.

Miles.	Produce.	Miles.	Produce.	Miles.	Produce.
Carentan to Per-		Mountaban,	20 45s.	Faou,	10 17s.
ry,	10 80s.	Broons,	12 40	Chateaulin,	10 23
Coutances,	10 50	Lamballe,	17 32	Quimper,	15 13
Avranches	30 50	St. Brieux,	12 40	Rospolin,	12 20
Pont Orfin,	10 50	Guingamp,	17 30	Quimperlay,	15 19
Doll,	10 45	Belleisle,	12 40	L'Orient,	12 26
Hedé	18 20	Morlaiz,	20 35	Hennebon,	7 30
Rennes,	13 35	Brest,	34 30	Auray,	17 13
Vanes,	10 14	Savanel,	15 28	Duretal,	30 40
Musillac,	15 24	Nantes,	20 15	Guercefland,	17 26
La Roche Ber-		Ancenis	22 75	Le Mans,	10 8
nard,	10 13	St. George,	17 80	Allençon,	30 40
Auvergnac,	20 28	Ditto,	5 50	Nonant,	16 36
St. Nazaire,	18 40	Angers,	10 38		

Miles, 608.—Average produce, 1l. 14s. 9½d.

Guienne and Gascoigne.

Miles.	Produce.	Miles.	Produce.	Miles.	Produce.
Bagnere de Lu-		Navarens,	22 45s.	St. Severe,	15 40s.
chon to Mon-		St. Palais,	15 40	Plaisance,	35 45
rejeau,	18 20s.	Anspan,	14 18	Beek,	17 45
Bagnere Bigore,	25 30	Bayonne,	12 20	Auch,	14 45
Pau,	32 40	Tartafs,	40 16		

Miles, 259.—Average produce, 1l. 13s. 9d.

I have not much apprehension that my estimate, of the lands in these provinces through which my route led me, is materially erroneous; but there is great reason to doubt, whether the tracks I travelled through be similar to the

provinces at large. I have very little doubt, on the contrary, that the road conducted me, both in Bretagne and Guienne, through a track superior to the average of those countries. I was informed of some immense heaths in Bretagne, which had scarcely a house in ten leagues; and from the communication of a nobleman, perfectly well acquainted with the province, I have traced in the map a large track, in which the cultivation is quite inconsiderable—of such districts I saw little. And in Guienne, the *landes* of Bourdeaux have been notorious, and almost proverbial, for some centuries. I have been assured, that they do not contain less than 300 square leagues, or 1,468,181 English acres. It must not, however, be imagined, that all these, or nearly all, are waste; for the greater part is covered with pines that yield from 15s. to 20s. an acre. Much, however, is really waste and deserves the French appellation, *lande*. This immense district probably occupies about one-sixth part of all I have marked of Gascoign; five-sixths at the average noted, of 11. 13s. 9d. and one-sixth, three-fourths at 15s. and one-fourth at 2s. 6d. being mere waste;—the medium of this sixth, therefore, is 11s. 10d.; or, for the whole, 11. 10s. 1d.---The proportion of wastes, in Bretagne, is not well ascertained; I was assured, on no mean authority, that two-fifths of the whole province are uncultivated; and by a very intelligent nobleman, that even of 39 parts, 24 are *lande*, which amounts to three-fifths. And the author of the *Considerations sur le Commerce de Bretagne*, who knew it well, says, p. 30, that one-third of it is in that state. That part I visited, is not the worst; yet, from what I saw, I can easily credit there are three-fifths in that state. Anjou and Maine are equally noted for the immensity of their heaths (*bruyeres*), which are reported to extend 60 leagues at one place. In going from La Flèche to Tourbilly, I saw more than in any other quarter, but heard so much of them from persons I could depend upon, that I am clear my own notes of the country I passed through go a good deal beyond the fair average of the whole: a consideration which will induce me to calculate the three provinces of Bretagne, Anjou, and Maine, with that part of Normandy not included in the rich loam division, at 28s. It would swell these papers too much, to specify all my reasons for this estimation, which I have not made without duly adverting to various circumstances that affect the produce in different quarters of these provinces.

Observations.

One pound eight shillings average produce of all the lands of Bretagne, Anjou, Maine, and a considerable part of Normandy, some of which territories possess singular advantages, evidently marks the miserable state of agriculture. I am within bounds, when I offer the opinion, that the whole of this district, containing above fifteen millions of acres, and, with great probability, twelve mil-

lions.

lands capable of improvement, might be made to produce, on an average, 2l. 5s. per acre, without any extraordinary efforts, were the farmers induced to change their methods, and adopt new rotations of crops. Thus 17s. an acre would be gained to the community, which, on twelve millions, amounts to 10,200,000l. a year. Improvements, on the heaths of Bourdeaux, that is, in the Gascoign division, are not equally obvious, because on immense tracks the *proprietor* receives as much perhaps at present from pines, as he would receive were the whole in cultivation. But the difference to the nation is prodigious; it is not the net income of the landlord which makes a kingdom prosperous; it is the gross produce of the lands; this, on the heaths above-mentioned, would be trebled, though the landlords gained nothing. But there are on these heaths very considerable tracks not occupied by pines, but, on the contrary, left absolutely waste; I passed many of them which were noticed in other parts of this work; these are capable of as great an improvement as the heights of Bretagne: at present, they produce nothing, but are all capable of yielding from 40s. to 50s. an acre. If, however, they were converted into good sheep-walk only, the advantage would be very considerable.

DISTRICT OF CHALK.

Containing the Provinces of Champagne, Sologne, Touraine, Poitou, Saintonge, and Angoumois.

Arois Sologne. Miles, 50.—Average produce, 5s.

	Miles.	Produce.		Miles.	Produce.
ANGOUMOIS.—Cavignac to Monlieu,	15	4s. 6d.	Angoulême,	25	24s.
Barbesieux,	22	24s.	Verteuil,	27	24
Miles, 89.—Average produce, 1l. 0s. 8½d.					

	Miles.	Produce.		Miles.	Produce.		Miles.	Produce.
POITOU.—Vivonne,	35	35s.	Poitiers,	12	25s.	Chateaurault,	25	25s.
Miles, 72.—Average produce, 1l. 9s. 10¼d.								

	Miles.	Produce.		Miles.	Produce.
TOURAIN.—To Tours,	25	40s.	Amboise,	17	40s.
Saumur,	10	60	Blois,	25	60
Miles, 77.—Average produce, 2l. 9s. 1d.					

	Miles.	Produce.		Miles.	Produce.
CHAMPAGNE.—Near Meaux to Chateau Thierry,	30	40s.	La Loge,	12	10s.
Epernay,	25	40	Chalons,	12	10
Rheims,	15	50	Ove,	15	20
			St. Menchoud,	15	27
Miles, 124.—Average produce, 1l. 13s. 5d.					

I received no information relating to the parts of Poitou, Touraine, and Sologne, which I had not examined, that gives me reason to doubt of the general resemblance between the different districts of those provinces. I was, however, assured, that if I saw more of Angoumois, I should form a better opinion of it than from the part I had viewed: such hints, from persons of observation, ought not to be disregarded; and will induce me to suppose the average value something higher, *viz.* 11. 4s.—This province is said, by an author who has written upon it, to contain—arable, 437,000 journals;—vines, 290,000;—grafs, 145,000;—woods, 107,400;—*chaumes*, 88,000;—total, 1,067,400. Beside forests and wastes.—What *chaumes* means, distinct from arable land, I know not; unless it be arable left to weeds for some years, after being exhausted by crops*. The case with Champagne is exceedingly different:—a very considerable portion of that province, which I did not view, is called *Pouilleux*, or lousy, from its poverty of soil—a poor hungry chalk. But my route, except from Rheims to Chalons, was in the vale of the Marne, and through the finest vineyards of the province. The provincial assembly of Chalons sent to the ministry a representation of the condition of the whole province, in which they gave a detail of its products as follows:

Extent, in arpents, -	4,000,000	Of which wood, -	850,000
		meadow, -	150,000
		vines, -	100,000
		commons, -	97,000
		vague, -	160,000
		arable, -	2,643,000
			<hr/>
			4,000,000
Total gross produce, -	60,000,000 liv.	—Or, per arpent, -	15 liv.

Representations of this kind, however, are rarely deserving of much attention, in those circumstances that concern the value or income of lands, for it is always the interest of such bodies to sink the value; and no doubt can be entertained in the present case; as it is impossible, that the valuation of 15 liv. can be just, if there be the quantity of vines, meadow, and arable lands here specified; since these alone must, in the nature of things, produce much more than 60,000,000 liv. For the vines at 150 liv.—the meadows at 80 liv.—and the arable at no more than 20 liv. amount to 79,860,000 liv.—If the wood were to yield no more than 10 liv. it adds 8,500,000 liv. making 88,360,000 liv. without reckoning a livre for the rest. Instead of 15 liv. per arpent on the whole, I have no hesitation at all in calculating at 25 liv. which makes 11. 6s. 3d. per acre.

* *Essai d'une methode a etendre les Connoissances des Voyageurs*, par M. Meunier. 8vo. 1779. tom. 1. p. 176.

Recapitulation.

Sologne,	50 miles, at 5s.	£. 12 10 0
Angoumois, 89	at 1l. 4s.	106 16 0
Poitou, 72	at 1l. 9s. 10½d.	107 9 6
Touraine, 77	at 2l. 9s. 1d.	188 19 5
Champagne, 124	at 1l. 6s. 3d.	162 15 0
<hr/>		<hr/>
412		578 9 11 Average, 1l. 8s.

Observations.

The produce of these wretched provinces, rising so high as 28s. is, in a great measure, to be ascribed to vines, which, it is always to be noted, is a branch of cultivation better understood than any other in France, if we may judge from the general success that attends it. Without the aid of the vineyards, the average produce of the chalk districts would be low indeed. Nothing can be worse cultivated, or rather more neglected. Sainfoin is known, and yet no use is made of it, comparatively speaking; so little understood, that I have seen the farmers sedulously summer-fallowing a field at no slight expence, in order to get some miserable rye and oats, while his adjoining field was abandoned to nature, as not worth cultivating. The chalk provinces contain 16 millions of acres: and the whole are susceptible of a very easy and obvious improvement, to the amount of 15s. an acre, which, on 12 millions only, would add nine millions sterling per annum to the wealth and prosperity of the nation; and would still be capable of much greater improvement, and yet would be far behind what we are well acquainted with in some parts of England.

DISTRICT OF GRAVEL,

Contains Bourbonnois and Nevernois.

Miles.	Produce.	Miles.	Produce.	Miles.	Produce.
Autun to Luzu, 22	15s.	St. Poncrin, 30	26s.	Pogues, 8	30s.
Chavanne, 27	15	Roanne to Moulins, 45	15	La Charité, 8	25
Moulins, 10	15	St. P. le Mont, 13	12	Pouilly, 9	50
Riaux, 10	12	Magny, 7	30	Croissiere, 47	25
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Miles, 241.—Average produce, 1l. os. 6½d.					

I saw too little of the Nevernois to judge of its equalizing what I remarked in other similar tracks, and therefore have given these products from information, on comparing them with other districts I knew much better. There are no particular circumstances that make the attainment of something approaching accuracy

accuracy difficult. My information at Moulins was, that three-fourths of the Bourbonnois are heath, broom, or wood; if any thing like this be true, I certainly am not too low in the estimation, but probably above it.

Observations.

These must be ranked among the most improveable of the French provinces. The agriculture that is carried on here (1 fallow, 2 rye) is hardly better than that of Sologne, though the crops are superior. The whole country being inclosed, there is little wanted but to change the course of husbandry, and to multiply and improve the breed of sheep. A farmer, with a little money, and much skill, would no where make a fortune sooner than in the Bourbonnois.—These provinces, instead of 20s. an acre, ought to produce 33s. which, over more than three millions of acres, would be an improvement of some consequence to the nation.

DISTRICT OF STORY SOILS.

Contains Loraine, Bourgogne, Franche Compté, &c.

Miles. Produce.			Miles. Produce.			Miles. Produce.		
St. Menchoud to			Savern,	49	33s.	Dole,	10	30s.
Metz,	62	27s.	Befort,	28	30	Dijon,	28	45
Pont a Mousson,	17	36	Beaume,	35	25	Beaune,	22	85
Nancy,	17	35	Besançon,	17	30	Mont Cenis,	28	40
Luneville,	17	40	Orechamps,	12	30	Autun,	20	18
Miles, 362.—Average produce, 1l. 15s.								

From information, on which I have reason to depend, I am inclined to believe, that the line traversed, in these provinces, is a good deal richer, and more cultivated than the average of them; which is a natural supposition, from the road leading very much in vales by rivers, and by many considerable towns: on this account it will be proper to make a deduction of 6s. an acre, and to calculate the average produce at 1l. 9s.—Commons are of immense extent in Loraine, and yield scarcely any thing; for the cattle that are starved, rather than kept on them, are attended with the same loss, want, and even misery, which we see so often in England.—50s. an acre ought, moderately speaking, to be the produce of these provinces, in which I saw no bad land; or so little, as not to prevent any general conclusions. Here is, therefore, a deficiency of a guinea an acre over 15 or 16 millions of acres.

DISTRICT OF VARIOUS LOAMS.

Contains Limosin, Berry, and La Marche.

Miles.	Produce.	Miles.	Produce.
Acrofs Berry, 60	30s.	La Marche and Limosin, 130	32s.
Miles, 190.—Average produce, 1l. 11s. 4½d.			

These provinces are disgraced by miserable husbandry, though possessing the advantage of a good climate, and a soil almost every where good. Even the sands are of a quality which well adapts them to very profitable courses of husbandry, that are here utterly unknown. The produce, instead of 31s. ought to be 50s.—for the whole country that I saw is inclosed, and wants little more than a skilful variation in the courses of crops. Here is a loss of 19s. an acre over six or seven millions.

DISTRICT OF MOUNTAIN.

Contains Auvergn, Dauphiné, Provence, Languedoc, &c.

Miles.	Produce.	Miles.	Produce.	Miles.	Produce.
Rouffillon, 56	30s.	Lodeve, 36	5s.	Le Puy, 15	25s.
LANGUEDOC.		Beziers, 40	15	Pradelles, 20	20
Narbonne to Nimes, 94	50	Carcassonne, 40	40	Thuytz, 20	25. 6d.
Pont du Gard, 12	38	Fanjour, 16	30	Villeneuve, 22	10
Gange, 30	30.	St. Martory, 86	27	Montelimart, 20	25
Miles, 507.—Average produce, 1l. 8s. 6½d.					

DAUPHINE.

Miles.	Produce.	Miles.	Produce.	Miles.	Produce.
L'Oriol, 15	60s.	PROVENCE.		Tour d'Aigues, 20	30s.
Pierelatte, 15	6	Avignon, 19	26s.	Marseilles, 20	38
Orange, 20	28	Lisle, 16	60	Cuges, 21	25
Pont Beauvoisin to Lyons, 46	35	Vaucluse, 20	45	Toulon, 20	10
LYONNOIS.		Organ, 12	60	Hyerres, 10	60
Les Arnas, 17	30	Salon, 15	15	Frejus, 30	5
Roanne, 28	25	St. Canat, 20	28	Cano, 22	5
		Aix, 12	60	Nice, 25	10
Miles, 423.—Average produce, 1l. 8s. 8½d.					

AUVERGN.—Riom, 20	30s.	Briude, 17	40s.	Fix, 20	15s.
Miles, 57.—Average produce, 1l. 7s. 8d.					

The author of the *Histoire des Plantes de Dauphiné*, says, in his preface, that if that province were divided into three parts, three-fourths of one would be cultivated ;

cultivated; more than three-fourths of another mountains, and uncultivated; half the third mountain, and one-half in culture. I am inclined to think, that these notes do not materially vary from truth, except in the case of Languedoc, which here appears inferior in produce to what I conceive to be the fact, for reasons too complex to detail at present. I have reflected on various circumstances connected with this question, and believe I shall be well founded in estimating that province at 1l. 11s. instead of 1l. 8s. 6d.

507 miles, at 1l. 11s. per mile.---423 at 1l. 8s. 8½d.---57 at 1l. 7s. 8d.
Average, 1l. 9s. 9d.

Those of my readers, who have travelled only through the vale, so rich in various productions, that reaches from Narbonne to Nîmes; who have viewed the exuberant fertility of the watered grounds of Avignon to Vaucluse, or the rich borders of the Rhone at Montelimart, or the vale washed by the Isere, will find it difficult to believe, that provinces which can present such pictures of fertility should, on an average, produce no more than what has been stated; but they should have in their recollection the proportion of the whole district that is mountainous. None of the vales, through which I travelled, are of any considerable breadth, except the vicinity of Toulouze. That from Narbonne to Nîmes, which is the most celebrated for its productions, is no where more than a few leagues across: mountains are every where contiguous; and I crossed very extensive tracks of these that appeared to be the least productive of any land I saw in France. The Vivarais has been extolled for its cultivation; some vales and slopes undoubtedly evince much industry: but they are usually accompanied by tracks of ten and twenty times the extent that yield little. I must make the same remark on this district of mountain that I have done on so many other occasions; every part, except the rich vales, is capable of great and palpable improvement. I examined the mountains between Gange and Lodeve with attention, because they appeared to be in a state of the most miserable neglect, and the least productive of any I saw in Languedoc; and I am confident they might with great ease be made to produce four times as much as they yield at present, were they improved for sheep only. A system of tillage is too much introduced, by small proprietors, on all the mountains of France; they should be tilled with no other view than of being prepared for grasses, and for profit derived by means of sheep and cattle, especially the former. This vast portion of the kingdom, containing 28 millions of acres, might, with very moderate exertions be brought to produce 15 millions sterling more than at present; and still be far from that pitch of improvement of which it is really capable.

GENERAL RECAPITULATION.

In order to ascertain the proportional areas of the several divisions into which I have thrown the kingdom, according to the soil of it, I procured a copy of the map to be made on a sheet of paper of equal and similar thickness, as exactly as could be chosen; and then cut out, with a fine pair of scissors, the several divisions, which were first weighed separately, and afterwards the whole together. All France weighed 413 weights, equal to one-fourth of a grain. The several divisions as follow:

The rich district of the N. E.	57 parts of 413.—	The plain of the Garonne	24.—
The plain of Alsace	2.—	The Bas Poitou, &c.	6.
RICH LOAM,			89
Bretagne, Anjou, Maine, and part of Normandy	48.—	Part of Guienne and Gascogn	32.
HEATH,			80
MOUNTAIN,—containing Auvergn, Languedoc, Rouffillon, Rouerge, Provence, and Dauphiné. (Of these Dauphiné by itself 14.)			90
CHALK,—containing Champagne, and parts of Angoumois, Poitou, Touraine, Isle of France, Sologne, &c.			52
GRAVEL,—containing the Bourbonnois, and Nevernois			12
STONE,—containing Loraine, Franche Compté, Bourgogne, and part of Alsace,			64
SAND, granite, gravel, stone, &c. containing the Limosin, La Marche, Berry, &c.			26
			<hr/>
			413

The question arising from these propositions, is the following:—If 413 give 131,722,295 acres, what will be the proportional quantities of these divisions respectively? The answers are these:

	Acres.	Acres.
Rich district of the N. E.	18,179,590	
Plain of the Garonne,	7,654,564	
Plain of the Alsace,	637,880	
Bas Poitou, &c.	1,913,641	
Rich Loam,		28,385,675
Bretagne, Anjou, &c.	15,307,128	
Guienne, &c.	10,206,085	
Heath,		25,513,213
Mountain,		28,707,037
Chalk,		16,584,889
Gravel,		3,827,282
Stone,		20,412,171
Sand, &c.		8,292,444
		<hr/>
		131,722,711
Error in weighing,		416

And the products of these divisions, according to the preceding minutes, are,

	Acres.	£.	s.	d.	—	£.	s.	d.
Rich Loam,	28,385,675	—	2	13	9½	—	76,345,638	7 9½
Heath,	25,513,213	—	1	8	9¼	—	36,754,972	9 6¼
Mountain,	28,707,037	—	1	9	9	—	42,701,717	10 9
Chalk,	16,584,889	—	1	8	0	—	23,218,844	12 0
Gravel,	3,827,282	—	1	0	6½	—	3,930,937	11 1
Stone,	20,412,171	—	1	15	0	—	35,721,299	5 0
Sand,	8,292,444	—	1	11	4¼	—	12,950,133	11 3
	<hr/>						<hr/>	
	131,722,711		1	15	1¼		231,623,543	7 5¼

The measurement of the kingdom here given, includes its whole surface, roads, rivers, canals, towns, &c. ; wherefore a deduction must be made from the total area, and also from the total produce, calculated at the above mentioned average per acre. Mr. Necker tells us, there are 9000 leagues of roads in France. Let us allow 10 toises of breadth, which is not too much, considering not only the great width of the roads themselves, but the waste of ground they occasion on each side; this will give for the whole 228,200 arpents of Paris, or 193,207 English acres. Rivers probably occupy a much larger space. If the number of acres be supposed 131,000,000, and the 722,711 be given up for all these deductions, we possibly may not be far from the truth; as it is to be remembered, that forests, woods, heaths, wastes, and commons, are included in the calculation.

	Acres.	£.	s.	d.	—	£.
Totals,	131,722,711	—	1	15	1¼	—
Deduct,	722,711	—				—
	<hr/>					<hr/>
	131,000,000	—				230,355,037
	<hr/>					<hr/>
	In livres tourn.		40			5,240,000,000

The next inquiry, which is not unimportant, is concerning the division of this total produce into the most material articles that compose it, such as wheat and rye; vines; wood; arable land in general; meadow and pasture;—this is a much more difficult inquiry; for the data on which the calculation is to be made are uncertain, and disputed. By one writer*, the lands *in culture* are asserted to be 112,760,000 arpents. By another 70,470,000†. By a third, 65,000,000‡. By a fourth, the arable is calculated at 40,000,000§. Another makes 60,000,000 of winter and spring corn and fallow||. Another, 18,000,000 of wheat and rye, as much of spring corn, and as much of fallow¶. The authors of the *Encyclopædie* estimate the corn, cultivation, and fallow,

* The Maréchal de Vauban. † *Apol. sur l'Édict de Nantes.* ‡ Voltaire § Du Pont; de l'Ex. & Imp. des Grains Soissons. 1764. p. 150. || De l'Aminist. des Finances, par M. Malpart. 8vo. 1787. p. 31. ¶ *Recherches sur la Houille d'Engrais.* tom. ii. p. 3.

at 50,000,000*. The Marquis de Mirabeau makes the same 60,000,000†; in which a later author‡ agrees with him, calculating by the consumption of the people. Monf. Dcllay d'Agier, in the National Assembly, calculated the arable at 70,000,000§.—It is sufficiently evident, from the variety of these accounts, that their authors did not calculate on the same data. The common consumption of bread corn, by the people of France, is known, from many observations and experiments, to be 3 septiers a head for both sexes and all ages, on an average. Now, if we compute the people at 25,000,000 (and we cannot at a less number); this makes 75,000,000 of septiers, each of 240 lb. a French weight, or 342,105,263 English bushels, at 57 lb. If, therefore, the average product be 18 bushels per acre, there are consequently 19,005,847 acres employed in raising that quantity of bread corn. Reckoning the seed at $2\frac{1}{2}$ bushels an acre, there must be allowed farther 3,006,325 acres; in all 22,012,172 acres. But here it is necessary to remark, that many of the people in France eat but little rye, and no wheat: in part of Normandy and Bretagne, they live very much, though not entirely, upon buck-wheat. In Limosin, La Marche, and in part of Languedoc, they eat chefnuts abundantly; and through the southern parts of the kingdom, they are nourished principally by maiz. To suppose, therefore, that the quantity of land here noted is all under wheat or rye, would be a gross error. It is, however, very probable, that those two products, with maiz, do not occupy a less extent; which calculation would set the buck-wheat, millet, potatoes, chefnuts, &c. against that portion of wheat, rye, and maiz consumed by cattle and manufactures; but this supposition has no data for its foundation. There is a considerable export of wheat flour to the West-Indies, but no notice can be taken of it here, as the kingdom, on the other hand, imports largely.—About two-thirds of the arable lands in France, as I conjecture from reviewing the article of courses of crops, are under the rotation of three years, *viz.* 1, fallow; 2, wheat or rye; 3, spring corn, or some other course similar in its result. The other third is made up of a great variety of courses, that cannot be brought to a standard for drawing any conclusions. In some districts, the course is for two years; but in the greater part it is for more than three. Hence we may safely conclude, that the arable lands of the kingdom exceed rather than fall short of thrice 22 millions of acres, or in the whole 66 millions. I should conceive, that they cannot be less than 70. The fallows amount to 15 or 16 millions.

Vines.

Notwithstanding the aides and customs afford some assistance towards calculating the consumption and export of wine, yet it is very difficult to estimate

* Tom. vi. p. 533. Folio edit. † *Theorie de l'Impôt.* p. 142. ‡ *Credit National* 1789. p. 102. § *Balance du Commerce.* 1791. tom. 2. p. 220.

with any degree of certainty, the quantity of vineyards in the kingdom. Of this difficulty, we may judge, by observing the amazing difference in the reports of French writers. Monf. le Trône*, who appears generally very well informed, gives 1,600,000 arpents for their extent; this the same as the calculation of M. de Mirabeau†; but another writer, who published one year after only, calculates the quantity (however from very vague ideas) at 18,000,000 ‡. —Monf. Lavoisier supposes the produce 80,000,000 liv. §—The *œconomistes*, of the *Encyclopædie*, make the annual produce 500,000,000 liv. ||. This, at the average produce of 175 liv. per acre (see the chapter on vines) makes 2,857,142 acres. If we deduct from this sum of 500,000,000 liv. that of 40,000,000, which is nearly the export of wine and brandy, there will remain 460,000,000 liv. for the home consumption of France.—1*ƒ.* per diem for 25,000,000 of people, amounts to 456,250,000 liv.; but I cannot conceive that this is an adequate allowance, poor as the lower classes are in France. Yet that the author of *Credit National* has committed a gross error, will appear from considering, that 18,000,000 of arpents de Paris, which is his calculation, producing in the proportion of 175 liv. per English acre, amount to about 3000 millions of livres; that is to say, nearly as much as many writers make the whole land produce of France. I cannot, however, agree, as I have just observed, to the calculation of 1*ƒ.* per diem for the home consumption; the number of people in the kingdom, who either drink their own wine, or are provided with it by their masters, in both which cases the consumption is void of that œconomy which always takes place in a greater degree when the commodity is *bought*, must render such a calculation below the truth: for it is to be remembered, that the 1*ƒ.* per diem is a mark only of that quantity of wine which 1*ƒ.* represents in the market; but which, in so many instances, is neither bought nor sold. I met with labourers in Languedoc, who drank each three bottles of strong wine a day; and I saw, amongst the poor, in every part of the kingdom, an appearance of a pretty regular consumption, either of wine or cyder; and recourse was not had to water, but in case of failing crops. If, by calculating the consumption at 2*ƒ.* a-day, I meant that so much *money* was thus *expended*, the idea would be absurd and extravagant; but in this case, through all the wine provinces, no *expenditure* takes place; an immense quantity is consumed which is neither bought nor sold—and which, in plentiful years, has no value: money is here merely a measure of quantity. *Price* considered, the consumption per head of 4½*ƒ.* at Paris, is twenty times greater than 2*ƒ.* for the whole kingdom. If the reader be not very careful in this combination, he must of necessity think the estimate high; but, taken as a calculation of the real money-payment, pro-

* *De l'Administration Provinciale de l'Impôt.* 8vo. 2 tom. 1788. tom. i. p. 293.

† *Theorie de l'Impôt.* p. 126. ‡ *Credit National.* 8vo. 1789. p. 106.

§ *Résultats d'un Ouvrage remis au Comité de l'Imposition.* 8vo. 1791. p. 35. || Art. Grains. bably

bably would not be near 1 *l.* But the soil as much produces wine that is given away, as wine that is bought. It is like that consumption of wood which the poor make in all countries by theft. When the space of land occupied by vines is the question, of what consequence is it whether the wine be bought, given, or stolen?—Upon the whole, I am inclined to calculate the vineyards of France at five millions of acres; in which case, their produce will amount to 875,000,000 *liv.* and the consumption of the people will be under 2 *l.* a-head.—The consumption of Paris, according to the *entrées*, amounted to 36,000,000 *liv.* (See *M. Lavoisier Resultats d'un ouvrage*, 1791, p. 43.) or near 4 *l.* per head per diem; but this, as every one well knows, was not the whole; for it supposes nothing for contraband, which probably was not less than one-eighth, and which would make it nearly 4½ *l.* a head.

Woods.

There is as great a difference in the calculation of the extent of woods, as of that of vines. The Marquis de Mirabeau represents them as 30,000,000 of arpents*, in which another writer agrees†. But another allows only 6,000,000 ‡. And a third, 8,000,000§.—Neither of the three gives any reasons whatever for his opinions; consequently they may be mere conjectures. There are two methods, by which some approximation to the truth may be gained; 1, by the maps of Cassini; 2, by the consumption of the people.—In examining the maps, I measured, as accurately as possible, the proportion of the space covered by wood in each map; and, from many experiments on 140 of them, I found the following result:—but, it is necessary to premise, that I suppose each map to contain one million of arpents, or acres; not because they are the real contents, but merely to be enabled from the total to calculate the proportion of the whole. The first of the following columns contains the number of maps, the second the proportion of the surface covered by wood; and the third the number of acres of wood, supposing each map to represent one million of arpents of country. Example of the first line; there are three maps, in which half of the contents is wood; and consequently, if those maps contain each one million of arpents, there are 1,500,000 arpents of wood.

		Arpents.			Arpents.			Arpents.
3	$\frac{1}{2}$	1,500,000	6	$\frac{1}{8}$	750,000	12	$\frac{1}{13}$	800,000
16	$\frac{1}{3}$	5,333,000	10	$\frac{1}{9}$	1,111,000	6	$\frac{1}{10}$	375,000
3	$\frac{1}{4}$	750,000	14	$\frac{1}{10}$	1,400,000	2	$\frac{1}{17}$	110,000
13	$\frac{1}{5}$	2,600,000	9	$\frac{1}{12}$	750,000	16	$\frac{1}{20}$	800,000
16	$\frac{1}{6}$	2,666,000	2	$\frac{1}{13}$	154,000	1	$\frac{1}{10}$	33,000
9	$\frac{1}{7}$	1,285,000	2	$\frac{1}{14}$	140,000			
60		14,134,000	103		18,439,000	140		20,557,000

* *Theorie de l'Impôt*. p. 124.

† *Plan d'Administ. des Finances*, par M. Malpart. 8vo. 1787. p. 36.

‡ *Credit National*. p. 110.

§ M. Dellay d'Agier in the National Assembly.

Hence.

Hence it appears, that the quantity of wood may (rejecting the fraction) be called one-seventh of the kingdom; and as there are 131,722,295 acres in it, the woods amount to 18,817,470 acres. Upon this result, it is to be observed, that none but woods of considerable extent are marked in the maps; or at least if marked, have not an extent sufficient to come into such an estimation: hence this method, of ascertaining the quantity, is confessedly imperfect: if the maps be tolerably accurate, we are certain, that this calculation is below the truth.—The next method of inquiry is by the consumption of the people; I took some notes concerning it, in different parts of the kingdom, which will assist the calculation.

Consumption.

Quantity per ann.	Value.	Paris cords.	Quantity per ann.	Value.	Paris cords.
Liancourt, the poorest family, 60 liv.			Dijon, 24,000 souls, 40,000		
Orechamps, a little auberge,			moeul, which is, per family,		
25 loads, —	200	7½	of 6 souls, 10 moeul,	130	4½*
Auxonne, ditto, one fire,	200	7½	Riom, a poor family,	80	3
———— a poor family,	80	3	Clermont, ditto, 10 cord,	60	2½
Dijon, a poor family, 5½ moeul at 4 cubical feet,	71	2½	Tour d'Aigues, the poorest family, 60 quintals,	60	2
			Average of the poor families,	70	2½

It is here proper to examine the consumption of Paris.

From 1731 to 1740, the quantity for which duty was paid at the gates was, on an average †, cords, 192,362

In 1748, *voyes*, 350,000—In 1770, 550,000—In 1778, 630,000 †.

I have procured the following from the bureau.

In 1784, <i>voyes</i> , 669,017	In 1786, <i>voyes</i> , 602,314	In 1788, <i>voyes</i> , 608,403
1785, 592,311	1787, 584,602	1789, 619,900
Average of the six last years, 612,091.		

Charcoal.

In 1784, <i>voyes</i> , each of 16 boifeau, or 5 bushels English,	790,100
1785, ————	783,319
1786, ————	767,900
1787, ————	795,001
1788, ————	749,167
1789, ————	687,429
Average, ————	762,152
Equal to cords of wood to form it, —	38,107
Average of both wood and charcoal, —	650,198

* Exclusive of charcoal.

† *De la Lande des Canaux de Navigation*, p. 373.

‡ *Recherches sur la Houille d'Engrais*, par M. de Lajlle vault. 12mo. 1783. tom. ii. p. 21.

consumption

Monf. Necker informs us, that the inhabitants are 660,000; if we call them 660,000 families, the consumption will be about 10 cords per family. The Dijon consumption of wood only per family, of ten moeul, at 64 cub. feet, is 640 feet, or $4\frac{1}{2}$ Paris cords. The Paris consumption of both wood and charcoal, at 140 cub. feet is 1400 feet. The difference between these is not greater than would be reasonably expected, if we consider the manufactures of Paris, the vast number of great hotels, and its being the centre of all wealth and all luxury. We are farther to suppose the 5,709,270 souls, inhabitants of all the towns of France (which is the result of the late enumeration) to be, exclusively of Paris, 1,000,000 of families, and we may allow them by the Dijon register, charcoal included, five cords each. To the remainder of French population, viz. 4,000,000 of families, we will suppose 300,000, each at four cords; and 3,700,000 at $2\frac{1}{2}$.

	Cords.
Paris at ten cords, _____	687,120
Other towns at five, _____	5,000,000
300,000 country families, at four, _____	1,200,000
3,700,000 ditto at $2\frac{1}{2}$, _____	9,250,000
	<hr/>
	16,137,120

Which, at the average price of 30 liv. * is 484,113,630 †, or sterling £. 21,179,971 6 3

We are, in the next place, to enquire into the produce of the woods of the kingdom. The following are the minutes:

Places.	Yrs. growth.	Produce. per ann.	Produce per Eng. acre.	Places.	Yrs. growth.	Produce. per ann.	Produce per Eng. acre.
Senar,	20 —	24 liv.	£. 0 16 8	Metz,	20 —	10 liv.	£. 0 15 0
Liancourt,	12 —	12 —	0 8 4	Luneville,	25 —	3 —	0 8 9
Falaife,	12 —	22 —	0 11 0	Besançon,	25 —	8 —	0 8 9
Normandy,	—	20 —	0 10 6	Do. near Forges,	—	12 —	0 12 9
Columiers,	9 —	20 —	1 0 0	Moulins,	15 —	3½ —	0 2 6
Mareuil,	20 —	15 —	0 10 6		—	—	—
Braban,	20 —	12 —	0 18 4	Average,	17	13	0 12 0

It is on this to be observed, that the sums here noted are to be considered as net produce, or rent; and that consequently the gross produce is more considerable, as there are many expences to be deducted; these cannot make it less than 14s. an acre, or 16 liv. And in the calculations to be founded on this produce, no difference arises from the age at which the wood is cut: if at 20 years, it is 320 liv. per acre, that is, twenty times sixteen: if at 100 years, it is 1600 liv. &c.

Hence 14s. an acre being the annual produce, it will give 30,257,101

* This is the average of the notes.

† Monf. Lavoisier calculates the produce of the woods of all France at 120,000,000 liv. *Résultats d'un ouvrage*, 1791, p. 35. I should probably be nearer the truth in asserting, that the consumption of manufactures alone amounts to this sum, than he is calculating the total at no more. The utter impossibility of the truth of his estimate, will appear by the consumption of Paris only, being by his own account 27,500,000 liv.

acres for the total of France.—Upon this, however, some observations are necessary, or erroneous conclusions must be the consequence.—If it is objected, that there are many families so poor as to be utterly unable to afford 60 or 70 liv. for fuel; I grant it readily, but immense numbers burn, though they buy perhaps none; they steal it as in England, as I was very generally informed; but this mode of acquiring it does not affect the calculation, since the wood is as clearly produced by the soil as if all was bought: I am, however, of opinion, that there are many families too poor, and too badly situated, to be able by any means to command such a consumption. But, on the other hand, if we take into the account, as we ought to do, the vast iron forges which are so numerous in Franche Comte, the Limosin, Lorraine, and other provinces; and the very considerable founderies, glass-houses, salt-pans*, and other manufactures, which consume astonishing quantities of wood, we shall be inclined to think, that many such deficiencies are amply counterbalanced; not forgetting consumption by house and ship-building.

Acres by the maps of Cassini, 18,817,470.—By the Consumption, 30,257,101.

Average of the two, 24,537,285.

Which, at 16 liv. per acre, is - 392,596,560 liv.—Or sterling, - £.17,176,099.

The Marquis of Mirabeau does not acquaint us with the data by which he calculated the quantity at 30,000,000; but as it is probable he went upon different grounds from those by which I have calculated, the two results may possibly be a confirmation of each other.

<i>Recapitulation.</i> —Arable lands,			70,000,000 acres.
Vines,			5,000,000
Woods,			24,537,285
			99,537,285
Remains for meadows, permanent pastures, such wastes as do			
not produce wood; roads, rivers, ponds, &c.			32,185,426
Total			131,722,711

A modern author† has calculated the meadows at 15,000,000 of arpents, that is, at one-fourth of what he makes the arable land; I do not conceive, from the notes I took throughout the kingdom, that they amount to one-third of that quantity. The cattle of great tracks of arable are supported without any meadows, upon clover, lucerne, &c.; in whole provinces there are none, except on the banks of rivers; and of these the breadth is not considerable. The plough moves to the water's edge of the Marne; and wherever I saw the Loire, the meadows were very inconsiderable, and often none at all. Chalk hills

* The salins of Franche Comte and Lorraine make 750,000 quintals, which costs 2 liv. per quintal in wood only; this is a consumption to the value of 2,500,000 liv. *Recherches & Consid. sur les Financ.* 4, 8vo. 1789. tom. ii. p. 163.

† *Credit National.* p. 105.

covered with wood, or gravelly plains under the plough, are found on the Seine; much tillage on the Garonne; and vines and rocks on the Rhone. On the Soanne there are large tracks of meadow; but these are found more generally on the smaller than on the largest rivers, and, relatively to the quantity of arable land, are very insignificant. The same author remarks, that the vineyards appear to every one more extensive than meadows; consequently these do not amount to 5,000,000 of acres, the space covered by vines. We have found the gross produce of the kingdom, by another mode of calculation, to be 5,240,000,000 liv. or 230,516,263l. The details now explained, give the following result:

	Acres.		French money.	English money.
Arable land, ———	70,000,000	at 40 liv.	2,800,000,000 liv.	£. 122,860,583
Vines, ———	5,000,000	175	875,000,000	38,225,250
Woods, ———	24,000,000	16	384,000,000	16,800,000
Meadow and rich pasturage, ———	4,000,000	100	400,000,000	17,500,000
Lucerne, &c. ———	5,000,000	100	500,000,000	21,875,000
Pastures and wastes, ———	23,000,000	* 10	230,000,000	10,062,500
	131,000,000	40	5,189,000,000	227,293,333

Hence it is clear, that the latter calculation, which is made on different data from the other, is probably a moderate one. At the same time, it comes as near to it as can be expected, from such distinct variations in the mode of estimation. Vines, meadows, and lucerne, are the only objects here that admit of little improvement; and it would be well for France, if their extent were proportioned to their merit. The product of the arable land is doubtless very much beneath what it might be. The product of arable, in England, may be estimated, perhaps not remotely from truth, at 50s. an acre, or 15s. more than France; which makes, in 70 millions of acres, a difference of 52,500,000l. or, in French money, 1,200,000,000 liv.: and no one should consider this as the utmost term of improvement, since it includes all arable in England, great tracks of which are very ill cultivated. By an estimate, drawn up with much attention, the arable land in that kingdom, at the rent of 15s. *well managed*, yields an average produce of 3l. 14s. 7d. per acre, which is considerably more than double of the French produce. Twenty-three millions of acres of pastures and wastes, one with another, at 10 liv. (more likely to be too high than too low an estimate), are a field for ample improvement. There are very few of these not susceptible of culture; but if ten millions of these acres were made, as they might be, to produce 40s. only an acre, the amount 20 millions sterling, would be a vast resource to the kingdom. Upon the question of the value of the gross produce of

* Mons. Roland de la Platerie informed me, at Lyons, that in general waste lands are sold for one-third of the price of woods; if the produce be proportioned, this would make that of wastes 5 or 6 liv. per acre; but in the present case all *pastures* come into the calculation.

France, the French writers vary much. The Marquis de Caffaux makes it 2,000,400,000 liv. or 87,517,500l.* Another late writer† 5,015,500,000 liv. or 219,428,125l. Another‡ makes it 1,780,330,000 liv. which is 77,889,437l.—Monf. de Tolozan makes it 1,826,000,000 liv. or 79,887,500l.§. And Monf. Dellay d'Agier, of the National Assembly, 1,449,200 liv.||.—These calculations being founded on no data that confer any authority, admit of no other merit than that of one conjecture being nearer the truth than another; but all are little more than guesses.

It is easier to calculate the produce of France than the rent of it, by reason of the various modes of letting or administering land. It will not, however, be far from the fact, to calculate the rent of the arable and lucerne at 15s. 7d. which is the average of my notes on that subject; the woods at 12s.; the vines at their profit of $8\frac{1}{2}$ per cent. on the purchase 45l.; the meadow at half produce, or 50 liv. that is 2l. 3s. 9d.; and the pastures and wastes at 2 liv. which is probably not too low, as they are, in so many districts, thrown into the bargain with the adjoining lands, in which case, though they are of essential consequence to the tenant in the produce, yet are they of none to the landlord.

Recapitulation.

	Acres.	Rent per acre.	Total.
Arable and lucerne,	75,000,000	at £.0 15 7	£.57,437,500
Woods,	24,000,000	0 12 0	14,400,000
Vines,	5,000,000	3 16 6	19,125,000
Meadow,	4,000,000	2 3 9	8,750,000
Wastes,	23,020,000	0 1 9	2,012,500
	131,000,000	0 15 10	101,725,000

While the produce of land in England is so much higher than in France, the landlord's rent is lower upon the whole; this is on account of the vines, which yield near one-fifth of all the rent of France. If, by net produce, we are to understand rent, and if it does not mean that, I know not what it can mean, the rent has been calculated by several writers: By M. de Forbonais¶, at 800,000,000 liv.; this is 35,000,000l. which is not within two-thirds of the probable truth. Another**, at 1,794,000,000 liv. or 78,487,500l. A third makes so gross a blunder as to estimate it at only 23,000,000††. A fourth‡‡, that it is supposed to

* *Questions a examiner avant l'Assemblée des Etats Generaux.* p. 36. 1788. † *Apologie sur l'Edit de Nantes.* ‡ *La Subvention territoriale en Nature, par M. Garnier de St. Julien.* 1789. 8vo. p. 24.

§ *Memoire sur la Commerce de la France.* 4to. 1789. p. 20. || *Balance du Commerce.* 1791. tom. ii. p. 220. ¶ *Prospectus sur les Finances.* 1789. p. 11. ** *Credit National.* 1789. p. 136.

†† *Patullo's Essay on the Cultivation of Bengal.* p. 5. Another work of this author, *Essai sur l'Amelioration de Terre.* 12mo. 1758, is much quoted by French writers.

‡‡ *Reflexions sur un question d'economie Pol.* par M. Varenne de Fenille. 8vo. 1790. p. 24.

exceed 1,000,000 liv. or 43,750,000l. Monf. de Calonne*, from many comparisons, states it at 1,500,000,000 liv. or 65,620,000l. But what are we to think of the political information of the parliaments of the kingdom, which declared, that the taxes at 600 millions exceeded two-thirds, and even reached three-fourths of *l'entier revenu territorial de la France*! †—By these expressions, they ought to mean the gross produce of the soil, and therefore were not near the truth by five-sixths.

C H A P. XVI.

Of the Population of France.

AS the subject of population is best treated by an inquiry into the industry, agriculture, division of landed property, &c. I shall at present merely lay before the reader some facts collected with care in France, that afford useful data for political arithmeticians. Monf. L'Abbé Expilly, in his *Dictionnaire de la France*, makes the number 21,000,000. And the Marquis de Mirabeau‡ mentions an enumeration of the kingdom in 1755; total 18,107,000. In Normandy 1,665,200, and in Bretagne 847,500. Monf. de Buffon, in his *Histoire Naturelle*, assigns for the population of the kingdom 22,672,077. Monf. Meflange, in his *Recherches sur la Population*, 4to. 1766, gives the details from which he draws the conclusion, that in many towns in Auvergne the births are to the number of inhabitants as 1 to 24 $\frac{1}{2}$ $\frac{1}{40}$ $\frac{1}{80}$; the marriages per annum 1 to 114 inhabitants; and families, one with another, composed of 5 $\frac{1}{8}$ $\frac{1}{24}$, or 24 families contain 124 inhabitants. In various towns in the Lyonnais, births are to the inhabitants as 1 to 23 $\frac{1}{4}$; the marriages per annum 1 to 111 persons; and families composed 4 $\frac{1}{4}$ $\frac{1}{80}$ ||; 80 families contain 381 inhabitants. In various towns in Normandy the births to the inhabitants as 1 to 27 $\frac{1}{2}$ $\frac{1}{20}$; marriages per annum 1 to 114 persons; families are composed of 3 $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{20}$; 20 represent 76 inhabitants. In the city of Lyons families are composed of 5 $\frac{1}{4}$ $\frac{1}{80}$; 60 represent 316 inhabitants; and there are a few above 24 persons per house in that city. In the city of Rouen families are composed of 6 $\frac{1}{3}$ $\frac{1}{80}$ persons; and there are 6 $\frac{1}{3}$ $\frac{1}{24}$ persons per house. At Lyons 1 in 35 $\frac{1}{2}$ dies annually; at Rouen 1 in 27 $\frac{1}{2}$. Mean life in some parishes in the generality of Lyons 25 years; ditto in the generality

* *Requêt au Roi*, 8vo. 1787. p. 155. † *Arrêts du Parlement de Grenoble* du 21, Aout 1787, du *Parlement de Toulouse* du 27, & du *Parlement de Besançon*, du 30.

‡ *L'Ami des Hommes*. 1760. 5th edit. tom. iv. p. 184. || The committee of mendicité asserts, that each family in France consists of five, as each has three children. *Cinquieme Rapport*, p. 34.

of Rouen 25 years 10 months. At Paris 1 in 30 dies annually; a family consists of 8, and each house contains $24\frac{1}{2}$ persons. By comparing the number of births in every month at Paris, for forty years, he found that those in which conception flourished most were May, June, July, and August, and that the mortality for forty years was as follows:

Months.	Deaths.	Months.	Deaths.	Months.	Deaths.
March, -	77,803	February,	66,789	October,	54,897
April, -	76,815	December,	60,926	September,	54,339
May, -	72,198	June, -	58,272	November,	54,029
January,	69,166	July, -	57,339	August,	52,479

It should appear from this table, that the influence of the sun is as important to human health as it is to vegetation. What pity that we have not similar tables of cities in all the different latitudes and circumstances of the globe.

At Clermont Ferrand 1 in 38 dies annually.—At Carcassonne 1 in $22\frac{1}{2}$.—At Valence 1 in $24\frac{1}{2}$.—At Vitry le François 1 in $23\frac{1}{2}$.—At Elbœuf 1 in $29\frac{1}{2}$.—At Louviers 1 in $31\frac{1}{2}$.—At Honfleur 1 in 24.—At Vernon 1 in 25.—At Gisors 1 in 29.—At Pont-au-de-Mer 1 in 33.—At Neufchatel 1 in $24\frac{1}{2}$.—At Pont-l'Eveque 1 in 26.—At le Havre 1 in 35. Upon a comparison in seven principal provinces of the kingdom, population in 60 years has augmented in the proportion of 211 to 196, or a thirteenth. General deduction;—that the number of people in France in 1764 was 23,909,400. Monf. Moheau* gives to the best peopled provinces 1700 inhabitants per square league; and to the worst 500; the medium 872, at which rate he makes the total 23,500,000, and an increase of a ninth since 1688. The isle of Oleron is peopled at the rate of 2886 per league, and that of Ré 4205. He also calculates that 1 in 36 dies, and 1 in 26 is born every year. Monf. Necker, in his work *de l'Administration des Finances de la France*, has the following particulars, which it is also necessary to have in our attention:—Births in the whole kingdom per annum, on an average, of 1776, 77, 78, 79, and 80, were 963,207:—which, multiplied by $25\frac{1}{2}$, the proportion he fixes on, gives 24,802,580 inhabitants in France. He notices the gross error of the *économistes*, in estimating the population of the kingdom at 15 or 16 millions.—A later authority, but given in whole numbers, and therefore not accurate, states the population of the kingdom at 25,500,000, of which the clergy are supposed to be 80,000, the nobility 110,000, protestants 3,000,000, and Jews 30,000†: The committee of imposts assert, that to multiply the births in the cities of France by 30, will give their population with sufficient truth; but for the country not so high‡. The rule of 30 would make the population 28,896,210. But much later than all these authorities, the National Assembly has ordered such inquiries to be made into the population of the kingdom, as have produced a

* *Recher. sur la Population de la France*. 8vo. 1778.
De Condorcet, Peyssonnel, & le Chapelier. tom. iii.

† *Bibliothèque de l'Homme public*, par Mess.
Rapport de Comité d'Impôt sur les Taxes. p. 27.
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much greater degree of accuracy than was ever approached before: this has been done by the returns of taxes, in which all persons, not liable to be charged, are entered in what we should call the duplicates; and as the directions for making these lists are positive and explicit, and no advantage whatever results to the people by concealing their numbers, but, on the contrary, in many instances, they are favoured in taxation, by reason of the number of their children, we may surely conclude, that these returns are the safest guides to direct our calculations. Here follows the detail:

Etat générale de la Population du Royaume de la France.

No.	Noms des Départemens.	Population des villes & bourgs.	Pop. des vil- lages & des Campagne.	Total de la population.	No.	Noms des Départemens.	Population des villes & bourgs.	Pop. des vil- lages & des Campagne.	Total de la population.
1,	L'Ain,	42,300	251,566	293,866		Brought forward,	2,447,880	10,019,531	12,599,677
2,	L'Aine,	86,800	305,253	392,053	43,	Du l'Orient,	84,600	185,266	269,866
3,	L'Allier,	42,800	203,280	246,080	44,	Du Lot,	55,100	212,900	268,000
4,	Les Hautes Alpes,	29,500	151,833	181,333	45,	Du Lot & Garonne,	39,200	262,666	308,666
5,	Des Basses Alpes,	38,060	180,606	218,666	46,	La Lozère,	19,400	176,226	195,626
6,	L'Ardeche,	24,600	185,533	210,133	47,	De Maine & Loire,	94,000	200,666	294,666
7,	Les Ardennes,	62,100	113,260	175,360	48,	La Manche,	88,100	242,566	330,666
8,	L'Ariège,	31,400	139,266	170,666	49,	La Marne,	76,200	206,466	282,666
9,	L'Aube,	40,100	157,255	197,355	50,	La Haute Marne,	36,100	177,293	213,393
10,	L'Aude,	48,400	203,120	251,520	51,	La Mayenne,	73,600	248,533	322,133
11,	L'Aveyron,	46,500	250,135	296,635	52,	La Meurthe,	65,900	314,336	380,236
12,	Les bouches du Rhône,	163,200	158,933	322,133	53,	La Meuse,	194,166	194,166	252,266
13,	Le Calvados,	105,350	329,850	435,200	54,	Le Morbihan,	42,400	448,266	490,666
14,	Le Cantal,	39,950	237,385	277,335	55,	La Moselle,	67,000	223,133	290,133
15,	La Charente,	44,100	224,060	268,160	56,	La Nievre,	34,500	218,100	252,600
16,	La Charente Inferi- eure,	89,120	279,306	368,426	57,	Le Nord,	168,800	399,733	568,533
17,	Le Cher,	47,900	228,366	276,266	58,	L'Oise,	53,900	266,100	320,000
18,	La Corrèze,	52,750	221,692	274,442	59,	L'Orne,	57,800	328,333	386,133
19,	La Corse,			132,266	60,	Du Paris,	556,800	168,533	725,333
20,	La Côte d'Or,	59,350	367,983	427,333	61,	Le Pas de Calais,	79,066	597,066	676,066
21,	Les Côtes du Nord,	27,500	441,166	468,666	62,	Le Puy de Dome,	82,550	322,783	405,333
22,	La Creuse,	22,800	244,293	267,093	63,	Les Hautes Pyrennées,	35,000	122,866	157,866
23,	La Dordogne,	51,900	353,433	405,333	64,	Les Basses Pyrennées,	55,490	231,465	286,955
24,	Le Doubs,	36,500	187,500	224,000	65,	Les Pyrennées Orien- tales,	31,100	131,033	162,133
25,	La Drome,	29,900	194,100	224,000	66,	Le Haut Rhin,	29,500	276,633	306,133
26,	L'Eure,	76,600	323,400	400,000	67,	Le Bas Rhin,	90,500	272,366	362,666
27,	L'Eure et Loire,	44,350	186,050	230,400	68,	Le Rhone & Loire,	215,000	460,440	675,840
28,	Le Finistère,	63,000	417,000	480,000	69,	La Haute Saonne,	18,700	231,966	250,666
29,	Du Gard,	190,700	124,900	225,600	70,	Saonne & Loire,	60,100	342,033	402,133
30,	De la Haut: Garonne,	71,600	182,053	253,653	71,	La Sarthe,	66,500	296,166	362,666
31,	Du Gers,	54,000	214,200	268,800	72,	Saône & Oise,	105,900	214,100	320,000
32,	La Gironde,	200,000	408,000	608,000	73,	Le Seine Inferieur.	184,550	261,316	445,866
33,	D'Hérault,	108,700	155,833	264,533	74,	La Seine & Marne,	52,300	293,300	345,600
34,	L'Ille et-Villaine,	50,800	439,866	490,666	75,	Des deux Sevrés,	56,300	157,033	213,333
35,	L'Indre,	50,650	219,750	270,400	76,	La Somme,	91,600	294,533	386,133
36,	L'Indre et Loire,	82,500	267,366	349,866	77,	Le Tarn,	171,500	51,900	223,400
37,	L'Illere,	33,700	269,873	303,573	78,	Le Var,	49,900	213,566	263,466
38,	Du Jura,	30,900	218,700	249,600	79,	La Vendée,	34,900	191,233	226,133
39,	Des Landes,	36,500	209,700	246,200	80,	La Vienne,	48,700	232,900	281,600
40,	Loire et Cher,	51,400	207,800	259,200	81,	La Haute Vienne,	41,300	140,033	181,333
41,	La Haute Loire,	41,100	172,233	213,333	82,	Les Vosges,	28,200	291,800	320,000
42,	La Loire Inferieure,	108,100	399,033	507,733	83,	L'Yonne,	72,900	366,566	439,466
Carry forward,		2,447,880	10,019,531	12,599,677	Total		5,709,270	20,521,538	26,230,808

Estimating the acres at 131,722,295, and the people as here detailed, we find that it makes, within a small fraction, five acres a head. That proportion would

would be 131,815,270 acres. If England were equally well peopled, there should be upon 46,915,933 acres, rather more than 9,000,000 souls. And for our two islands, to equal France in this respect, there should be in them 19,867,117 souls; instead of which there are not more than 15,000,000.

An observation, rather curious, may be made on this detail; it appears, that less than one-fourth of the people inhabit towns; a very remarkable circumstance, because it is commonly observed, and doubtless founded on certain facts, that in flourishing countries the half of a nation is found in towns. Many writers, I believe, has looked upon this as the proportion in England: in Holland, and in Lombardy, the richest countries in Europe, the same probably exists. I am much inclined to connect this singular fact, relating to France, with that want of effect and success in its agriculture, which I have remarked in almost every part of the kingdom; resulting also from the extreme division of the soil into little properties. It appears likewise, from this detail, that their towns are not considerable enough to give that animation and vigour to the industry of the country, which is best encouraged by the activity of the demand which cities afford for the products of agriculture. A more certain and unequivocal proof of the justice of my remarks, on the too great and mischievous division of landed property and farms in that kingdom could hardly have arisen: and it yields the clearest conviction, that the progress of national improvement has been upon the whole but small in France. The manufactures and commerce of the kingdom must have made a less advance than one would have conceived possible, not to have effected a proportion far different from this of a fifth. A really active industry, proportioned to the real resources of the kingdom, should long ago have *purged the country* (to use an expression of Sir James Stuart's), of those superfluous mouths,—I do not say hands; for they eat more than they work; and it is their want of employment that ought to drive them into towns.—Another observation is suggested by this curious table of population: I have repeatedly, in the diary of my journey, remarked, that the near approach to Paris is a desert compared with that to London; that the difference is infinitely greater than the difference of their population; and that the want of traffic, on the high roads, is found every where in the kingdom as well as at Paris. Now it deserves notice, that the great resort, which is every where observable on the high ways of England, flows from the number, size, and wealth of our towns, much more than from any other circumstance. It is not the country, but towns that give the rapid circulation from one part of a kingdom to the other; and though, at first sight, France may be thought to have the advantage in this respect, yet a nearer view of the subject will allow of no such conclusion. In the following list, the English column has surely the advantage:

London,

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English.	French.	English.	French.
London,	Paris,	Manchester,	Rouen,
Dublin,	Lyons,	Birmingham,	Lille,
Edinburgh,	Bourdeaux,	Norwich,	Nismes,
Liverpool,	Marseilles,	Corke,	St. Malo,
Bristol,	Nantes,	Glasgow,	Bayonne,
Newcastle,	Havre,	Bath,	Versailles.
Hull,	Rochelle,		

The vast superiority of London and Dublin, to Paris and Lyons, renders the whole comparison ridiculous. I believe London, without exaggeration, to be alone equal to Paris, Lyons, Bourdeaux, and Marseilles, as appears by the lists of population, and by the wealth and trade of all. But if we reflect, that the towns of England, &c. are portions of a population of 15 millions only, and those of France parts of 26 millions, the comparison shews at once the vastly greater activity there must be in one country than in the other*.

Of all the subjects of political œconomy, I know not one that has given rise to such a cloud of errors as this of population. It seems, for some centuries, to have been considered as the only sure test of national prosperity. The politicians of those times, and the majority of them in the present, have been of opinion, that, to enumerate the people, was the only step necessary to be taken, in order to ascertain the degree in which a country was flourishing. Two-and-twenty years ago, in my *Tour through the North of England*, 1769, I entered my caveat against such a doctrine, and presumed to assert, *that no nation is rich or powerful by means of mere numbers of people; it is the industrious alone that constitute a kingdom's strength*; that assertion I repeated in my *Political Arithmetic*, 1774; and in the second part, 1779, under other combinations. About the same time a genius of a superior cast (Sir James Stuart), very much exceeded my weak efforts, and, with a masterly hand, explained the principles of population. Long since that period, other writers have arisen who have viewed the subject in its right light; and of these none have equalled Mons. Herenschwandt, who, in his *Economie Politique Moderne*, 1786; and his *Discours sur la Division des Terres*†, 1788, has almost exhausted the subject. I shall not, however, omit to name the report of the committee of *mendicité* in the National Assembly. The following passage does the highest honour to their political discernment:—"C'est ainsi que malgré les assertions, sans cesse répétées depuis vingtans, de tous les écrivains

* What can be thought of those marvellous politicians, the nobility of Dourdon, who call for entrées at the gates of the cities, not as a good mode of taxation, but to restrain the too great populousness of cities, "which never takes place but by the depopulation of the country." *Cabier*, p. 20. The Count de Mirabeau, in his *Monarchie Prussienne*, recurs often to the same idea.—He was grossly erroneous, when he stated the subjects of the King of France as thrice more numerous than those of England, if he meant by England, as we are to suppose, Scotland and Ireland also. tom. i. p. 402.

† See particularly, p. 48, 51. &c.

politiques qui placent la prospérité d'un empire dans sa plus grande population, une population excessive sans un grand travail & sans des productions abondantes, seroit au contraire une dévorante surcharge pour un état ; car, il faudroit alors que cette excessive population partageât les bénéfices de celle qui, sans elle, eût trouvé une subsistance suffisante ; il faudroit que la même somme de travail fut abandonnée à une plus grande quantité de bras ; il faudroit enfin nécessairement que le prix de ce travail baissât par la plus grande concurrence des travailleurs, d'où resulteroit une indigence complète pour ceux qui ne trouveroient pas de travail, & une subsistance incomplète pour ceux-mêmes aux quels il ne seroit pas refusé*."—France itself affords an irrefragable proof of the truth of these sentiments ; for I am clearly of opinion, from the observations I made in every province of the kingdom, that her population is so much beyond the proportion of her industry and labour, that she would be much more powerful, and infinitely more flourishing, if she had five or six millions less of inhabitants. From her too great population, she presents, in every quarter, such spectacles of wretchedness, as are absolutely inconsistent with that degree of national felicity, which she was capable of attaining even under her old government. A traveller much less attentive than I was to objects of this kind, must see at every turn most unequivocal signs of distress. That these should exist, no one can wonder who considers the price of labour, and of provisions, and the misery into which a small rise in the price of wheat throws the lower classes ; a misery, that is sure to increase itself by the alarm it excites, lest subsistence should be wanted. The causes of this great population were certainly not to be found in the benignity of the old government yielding a due protection to the lower classes, for, on the contrary, it abandoned them to the mercy of the privileged orders. It is fair, however, to observe, that there was nothing in the principles of the old government, so directly inimical to population, as to prevent its increase. Many croaking writers in France have repeatedly announced the depopulation of that kingdom, with pretty much the same truth and ingenuity that have been exercised on the same subject in England. Mons. Necker, in a very sensible passage, gives a decisive answer to them, which is at the same time thoroughly applicable to the state of England, as well as to that of France†. Nor can the great population of France be attributed to the climate, for the tables of births and burials offer nothing more favourable in that kingdom, than in our own. And a much worse climate in Holland and Flanders, and in some parts of Germany and Italy, is attended with a still greater populousness‡. Nor is it to be

* *Plan de Travail du Comité pour l'extinction de la Mendicité présenté par M. de Liancourt.* 8vo. 1790.

p. 6. † *De l'Administ. des Finances. Oeuvres.* 4to. Londres. p. 320.

‡ A very ingenious Italian writer states the people of France at 1290 souls per league ; and in Italy at 1335. *Fabroni Reflexions sur l'Agric.* p. 243.

imputed to an extraordinary prosperity of manufactures, for our own are much more considerable, in proportion to the number of people in the two countries.

This great populousness of France I attribute very much to the division of the lands into small properties, which takes place in that country to a degree of which we have in England but little conception. Whatever promises the appearance even of subsistence, induces men to marry. The inheritance of ten or twelve acres to be divided amongst the children of the proprietor, will be looked to with the views of a permanent settlement, and either occasions a marriage, the infants of which die young for want of sufficient nourishment*; or keeps children at home, distressing their relations, long after the time that they should have emigrated to towns. In districts that contain immense quantities of waste land of a certain degree of fertility, as in the roots of the Pyrenees, belonging to communities ready to sell them, œconomy and industry, animated with the views of settling and marrying, flourish greatly: in such neighbourhoods something like an American increase takes place; and, if the land be cheap, little distress is found. But as procreation goes on rapidly, under such circumstances, the least check to subsistence is attended with great misery; as wastes becoming dearer, or the best portions being sold, or difficulties arising in the acquisition; all which cases I met with in those mountains. The moment any impediment happens, the distress of such people will be proportioned to the activity and vigour which had animated population. It is obvious, that in the cases here referred to, no distress occurs, if the manufactures and commerce of the district are so flourishing as to demand all this superfluity of rural population as fast as it arises; for that is precisely the balance of employments which prevails in a well regulated society; the country breeding people to supply the demand and consumption of towns and manufactures. Population will, in every state, increase perhaps too fast for this demand. England is in this respect, from the unrivalled prosperity of her manufactures, in a better situation than any other country in Europe; but even in England population is sometimes too active, as we see clearly by the dangerous increase of poor's rates in country villages; and her manufactures being employed very much for supplying foreign consumption, they are often exposed to *bad times*; to a slack demand, which turns thousands out of employment, and sends them to their parishes for support. Since the conclusion of the American war, however, nothing of this kind has happened; and the seven years which have elapsed since that period, may be named as the most decisively prosperous which England ever knew. It has been

* Mons. Necker, in the same section as that quoted above, remarks this to be the case in France; and justly observes, that the population of such a country being composed of too great a proportion of infants, a million of people implies neither the force nor labour of a million in countries otherwise constituted.

said to me in France, would you leave uncultivated lands waste, rather than let them be cultivated in small portions, through a fear of population?—I certainly would not: I would, on the contrary, encourage their culture; but I would prohibit the division of small farms, which is as mischievous to cultivation, as it is sure to be distressing to the people. The indiscriminate praise of a great subdivision, which has found its way unhappily into the National Assembly, must have arisen from a want of examination into facts: go to districts where the properties are minutely divided, and you will find (at least I have done it universally), great distress, and even misery, and probably very bad agriculture. Go to others, where such subdivision has not taken place, and you will find a better cultivation, and infinitely less misery; and if you would see a district, with as little distress in it as is consistent with the political system of the old government of France, you must assuredly go where there are no little properties at all. You must visit the great farms in Beauce, Picardy, part of Normandy, and Artois, and there you will find no more population than what is regularly employed and regularly paid; and if in such districts you should, contrary to this rule, meet with much distress, it is twenty to one but that it is in a parish which has some commons that tempt the poor to have cattle—to have property—and, in consequence, misery. When you are engaged in this political tour, finish it by seeing England, and I will shew you a set of peasants well clothed, well nourished, tolerably drunken from superfluity, well lodged, and at their ease; and yet amongst them, not one in a thousand has either land or cattle. When you have viewed all this, go back to your tribune, and preach, if you please, in favour of a minute division of landed property. There are two other gross errors, in relation to this subject, that should be mentioned; these are, the encouragements that are sometimes given to marriage, and the idea of the importance of attracting foreigners. Neither of these is at all admissible on just principles, in such a country as France. The predominant evil of the kingdom, is the having so great a population, that she can neither employ, nor feed it: why then encourage marriage? would you breed more people, because you have more already than you know what to do with? You have so great a competition for food, that your people are starving or in misery; and you would encourage the production of more to increase that competition. It may almost be questioned, whether the contrary policy ought not to be embraced? whether difficulties should not be laid on the marriage of those who cannot make it appear that they have a prospect of maintaining the children that shall be the fruit of it? But why encourage marriages which are sure to take place in all situations in which they ought to take place?—There is no instance to be found of plenty of regular employment being first established, where marriages have not followed in a proportionate degree. The policy, therefore, at best,

is useless, and may be pernicious. Nor is the attraction of foreigners desirable in such a kingdom as France. It does not seem reasonable to have a peasantry half-starved for want of employment, arising from a too great populousness; and yet, at the same time, to import foreigners, to increase the competition for employment and bread, which are insufficient for the present population of the kingdom. This must be the effect, if the new comers be industrious; if they belong to the higher classes, their emigration from home must be very insignificant, and by no means an object of true policy; they must leave their own country, not in consequence of encouragement given in another, but from some strokes of ill policy at home. Such instances are indeed out of the common course of events, like the persecutions of a Duke d'Alva, or the revocation of the edict of Nantes. It is the duty of every country, to open its arms, through mere humanity, to receive such fugitives; and the advantages derived from receiving them may be very considerable, as was the case with England. But this is not the kind of emigrations to which I would allude, but rather to the establishment of such colonies as the King of Spain's, in the Sierre Morena. German beggars were imported, at an immense expence, and supplied with every thing necessary to establish little farms in those deserts; whilst at the same time, every town in Spain swarmed with multitudes of idle and poor vagrants, who owed their support to bishops and convents. Suppress gradually this blind and indiscriminate charity, the parent of infinite abuse and misery, and at the same time give similar employments to your own poor; by means of this policy, you will want no foreigners; and you may settle ten Spanish families for the expence of one German. It is very common to hear of the want of population in Spain, and some other countries; but such ideas are usually the result of ignorance, since all ill governed countries are commonly too populous. Spain, from the happiness of its climate, is greatly so, notwithstanding the apparent scarcity of inhabitants; for, as it has been shewn above, that country which has more people than it can maintain by industry, who must either starve, or remain a dead weight on the charity of others, is manifestly too populous*; and Spain is perhaps the best peopled country in Europe, in proportion to its industry. When the great evil is having more people than there is wisdom, in the political institutes of a country to govern, the remedy is not by attracting foreigners—it lies much nearer home.

* An Italian author, with whom I had the pleasure of conversing at Turin, justly observes, "Quanto la popolazione proporzionata ai prodotti della natura e dell' arte è vantaggiosa ad una nazione, altrettanto è nociva una popolazione soverchia." *L' Abbate Vasco, Risposta al quesito proposto dalla Reale Accad. delle Scienze, &c.* 8vo. 1788. p. 85.

CONSUMPTION.

Twenty Years Consumption at Paris, of Oxen, Calves, Sheep, and Hogs, as entered in the Books of the Entrées.

Years.	Oxen.	Calves.	Sheep.	Hogs.	Years.	Oxen.	Calves.	Sheep.	Hogs.
1767,	68,763	106,579	358,577	37,899	1777,	71,755	104,600	343,300	35,823
68,	69,985	112,949	344,320	32,299	78,	73,606	107,292	328,868	36,204
69,	66,586	111,608	333,916	36,186	79,	73,468	99,952	324,028	38,211
70,	66,818	110,578	335,013	36,712	80,	71,488	104,825	308,043	41,419
71,	65,360	107,598	314,124	30,753	81,	70,484	99,533	317,681	41,205
72,	63,390	101,791	293,946	28,610	82,	72,107	100,706	316,563	44,772
73,	65,324	99,749	309,137	29,391	83,	71,042	98,478	321,627	39,177
74,	68,025	103,247	309,573	30,032	84,	72,984	100,112	327,034	39,621
75,	68,306	109,235	309,662	32,722	85,	73,846	94,727	332,628	28,697
76,	71,208	102,291	328,505	37,740	86,	73,088	89,575	328,699	39,572

Average.—Oxen, 69,883. Calves, 103,271. Sheep, 323,762. Hogs, 36,332.

These are the quantities for which duties are paid; but it is calculated by the officers of the customs, that what enters contraband, and for which nothing is paid, amounts to one-sixth of the whole*.

The consumption of flour is 1500 sacks per diem, each weighing 320 lb. requiring nine septiers of corn to yield four of those sacks, or 3375 septiers per diem. This is, per annum, 1,231,875 septiers; the French political arithmeticians agree in calculating the consumption of their people per head, at three septiers for the whole kingdom on an average; but this will not lead us to the population of the capital, as the immense consumption of meat in it must evidently reduce considerably that proportion. It may probably be estimated at two septiers, which will make the population 615,937 souls. Monf. Necker's account of the population was 660,000. The enumeration in 1790 made the numbers no more than 550,800; and there are abundant reasons for believing the assertion, that this capital was diminished by the revolution in that proportion at least. This point is, however, ascertained by the consumption, which is now 1350 sacks a day, or reduced one-tenth, which, at two septiers of corn, implies a population of 554,344; and as this comes within 2000 of the actual enumeration, it proves that two septiers a head is an accurate estimate; and though it does not perfectly agree with Monf. Necker's account of the former population

* To some it may appear strange, how such a commodity, as live oxen, can be smuggled in great quantities; but the means of doing it are numerous; one was discovered, and many more of the same sort are supposed to exist undiscovered: a subterraneous passage was pierced under the wall, going from a court-yard without the wall, to a butcher's yard within; and whole droves of oxen, &c. entered by it in the night for a long time, before it was known. The officers of the barriers are convinced, that, on an average of commodities, one-sixth is smuggled.

of Paris, yet it is much nearer to it than the calculations made to correct that account, by Dr. Price, and by the very able and ingenious political arithmetician, Mr. Howlet. As the late enumeration shews the population of Paris to have been (proportionably to the consumption of corn) 615,937 souls, when its births amounted to 20,550, this fact confirms the general calculation in France, that the births in a great city are to be multiplied by 30; for the above-mentioned number, so multiplied, gives 616,500, which comes so near the truth, that the difference is not worth correcting. M. Necker's multiplier is confirmed clearly; and the event, which gives to France a population of 26,000,000, has proved, that Dr. Price, who calculated them at above 30,000,000, was as grossly mistaken in his exaggeration of French populousness, as Mr. Howlet has shewn him to be in his diminution of that of England. It seems indeed to have been the fate of that calculator to have been equally refuted upon almost every political subject he handled; the mischief of inclosures—the depopulation of England—the populousness of France—and the denunciation of ruin he pronounced so authoritatively against a variety of annuitant societies, that have flourished almost in proportion to the distresses he assigned them. The consumption of wine at Paris, on an average of the last twenty years, has been from 230,000 to 260,000 muids per annum; average, 245,000. In 1789 it sunk rather more than 50,000 muids, by smuggling, during the confusions of that period. In 245,000 muids there are 70,560,000 Paris pints, or English quarts, which makes the daily consumption 193,315 quarts; and if to this, according to the computation of the *commis* of the barriers, one-sixth is to be added for smuggling, it makes 225,534, which is one-third of a quart, and one-tenth of that third per head per diem. The consumption of meat is very difficult to be calculated, because the weight of the beasts is not noted; I can guess at it only, and therefore the reader will pay no other attention to what follows than to a mere conjecture. I viewed many hundreds of the oxen, at different times, and estimate the average of those I saw at sixty stone; but as there are doubtless many others smaller, let us calculate at 50 or 700lb. and let us drop smuggling in these cases, since though it may on the whole, be one-sixth yet it cannot be any thing like that in these commodities; the calves at 120lb. the sheep at 60lb. and the hogs at 100lb.

Oxen,	-	-	69,883, at 700lb.	48,918,100lb.
Calves,	-	-	103,271, at 120	12,392,520
Sheep,	-	-	323,762, at 60	19,425,720
Hogs,	-	-	36,332, at 100	3,633,200
Total*,				84,369,540

* Long since this was written, I received Mons. Lavoisier's *Resultats d'un ouvrage*, 1791, in which he gives a table of the Paris consumption; but I do not know on what authority, for the weight per head he makes the total of all meats 82,300,000lb.

This quantity divided amongst a population of 615,937, gives to each person 136lb. of meat for his annual consumption, or above one-third of a pound per diem. During the same twenty years, the consumption of London was, on an average, per annum, 92,539 oxen, and 649,369 sheep*. These oxen probably weighed 840lb. each, and the sheep 100lb.; which two articles only, without calves or hogs, make 142,669,660; yet these quantities do not nearly contain the whole number brought to London, which, for want of such taxes as at Paris, can be discovered with no certainty. The consumption of Brest is registered for the year 1778, when 22,000 people, in 1900 houses, consumed 82,000 boisseau, each 150lb. of corn of all sorts; 16,000 barriques of wine and brandy, and 1000 of cyder and beer†. This consumption amounted to per head—corn $2\frac{1}{3}$ septiers, of 240lb. per annum;—wine, brandy, beer, and cyder, one-third of a quart per head per diem. Nancy, in 1733, when it contained 19,645 souls, consumed,

Oxen, 2402.—Calves, 9073.—Sheep, 11,863.—Total, 23,338.

It consumed, therefore, more than one of these pieces per head of its population. In 1738, when it contained 19,831 souls, it consumed,

Oxen, 2309.—Calves, 5038.—Sheep, 9549.—Total, 16,896‡.

Above three-fourths each. The consumption of Paris is three-fourths of one of these beasts per head of population. As the finest cattle in the kingdom are sent to the capital, the proportions in number ought to be less; but the wealth of that capital would have justified the supposition of a still greater comparative consumption.

C H A P. XVII.

Of the Police of Corn in France.

OF all subjects, there is none comparable to the police of corn, for displaying the folly to which men can arrive, who do not betray a want of common sense in reasoning on other topics. One tells us (I confine myself chiefly to French authorities, engaged as I am at present in researches in that kingdom), that the price is in exact proportion to the quantity of corn, and to the quantity of money at the same time in the kingdom||; and that when wheat sells at 36 liv. the septier, it is a proof there is not half enough to last till harvest§.—

* Report of the Com. of the Court of Common Council. 1786: Folio. p. 75. † *Encyclop. Methodique Marine*, t. i. part 1. p. 198. ‡ *Descrip. de la Lorraine*, par M. Durival. 3 tom. 4to. 1778. t. ii. p. 5.

|| *Consid. sur la Cherté des Grains*, par M. Vaudrey. 1789. 8vo. p. 5. § *Ib.* p. 7, 8, 19.

He proposes to have magazines in every market, and to prohibit, under severe penalties, a higher price than 24 liv. This would be the infallible method to have it very soon at 50, and perhaps 100 liv. That the price of corn does not depend on the quantity of money, is proved by the sudden rise proceeding from alarms, of which this author might have known an instance in the year he printed; for Monf. Necker's memoir to the National Assembly was no sooner dispersed, than the price rose in one week 30 per cent.; yet the quantity in the kingdom, both of money and corn, remained just as before that memoir was published. But it has already been sufficiently proved, that a very small deficiency of the crop will make an enormous difference in the price. I may add, that the mere apprehension of a deficiency, whether ill or well founded, will have the same effect. From this circumstance, I draw a conclusion of no trifling import to all governments; and that is, never to express publicly any apprehension of a want of corn; and the only method by which governments can express their fears, is by proclamations against export; prohibitions; ordonances of regulation of sale; arrets, or laws against monopolizers; or vain and frivolous boasts, like those of Monf. Necker, of making great imports from abroad—all these measures have the same tendency; they confirm amongst the people the apprehension of want; for when it is found, amongst the lowest orders, that government is alarmed as well as they themselves, their own fears augment; they rise in a rage against monopolizers, or speculators, as they ought rather to be called, and then every step they take has the never-failing effect of increasing the evil; the price rises still higher, as it must do inevitably, when such furious obstructions are thrown on the interior trade in corn, as to make it a matter of great and serious danger to have any thing to do with it. In such a situation of madness and folly in the people, the plenty of one district cannot supply the want of another, without such a monstrous premium, as shall not only pay the expence of transport, but insure the corn, when lodged in granaries, against the blind and violent suspicions of the people. To raise this spirit, nothing more is necessary than for government to issue any decree whatever that discovers an alarm; the people immediately are apprehensive of famine; and this apprehension can never take place without creating the reality in a great measure. It is therefore the duty of a wise and enlightened government, if at any time they should fear a short provision of corn, to take the most private and cautious measures possible, either to prevent export, by buying up the corn that is collected for exportation, and keeping it within the kingdom, a measure easy to be done through individuals, or to encourage import, and to avoid making any public decree or declaration. The history of corn, in France, during the year 1789, was a most extraordinary proof of the justness of these principles. Wherever I passed, and it was through many provinces, I made inquiries into the causes of the

scarcity; and was every where assured, that the dearnefs was the most extraordinary circumstance in the world; for, though the crop had not been great, yet it was about an average one; and consequently, that the deficiency must certainly have been occasioned by exportation. I demanded, if they were sure that an exportation had taken place?—They replied, no; but that it might have been done privately: this answer sufficiently shewed, that these exports were purely ideal. The dearnefs, however, prevailed to such a degree, in May and June particularly (not without being fomented by men who sought to blow the discontents of the people into absolute outrage), that Monf. Necker thought it right not only to order immense cargoes of wheat, and every other sort of corn, to be bought up all over Europe, but likewise, in June, to announce to the public, with great parade, the steps that he had taken, in a paper called *Memoire instructif*, in which he stated, that he had bought, and ordered to be bought, 1,404,463 quintaux of different sorts of grain, of which more than 800,000 were arrived. I was a personal witness, in many markets, of the effect of this publication; instead of sinking the price, it raised it directly, and enormously. Upon one market-day, at Nangis, from 38 liv. to 43 liv. the septier of 240lb.; and upon the following one to 49 liv. which was July 1st; and on the next day, at Columiers, it was taxed by the police at 4 liv. 5s. and 4 liv. 6s. the 25lb.; but as the farmers would not bring it to market at that price, they sold it at their farms at 5½ liv. and even 6 liv. or 57 liv. the septier. At Nangis it advanced, in 14 days, 11 liv. a septier; and at Columiers a great deal more. Now, it is to be observed, that these markets are in the vicinity of the capital, for which Monf. Necker's great foreign provision was chiefly designed; and consequently, if his measures would have had any where a good effect, it might have been expected here; but since the contrary happened, and the price, in two markets, was raised 25 per cent. we may reasonably conclude, that it did good no where; but to what was this apparent scarcity imputable? Absolutely to Monf. Necker's having said, in his memoir, “à mon arrivée dans la ministère je me bătai de prendre des informations sur le produit de la récolte & sur les besoins des pays étrangers*.” It was from these unseasonable inquiries, in
September

* He has introduced a tissue of the same stuff in his *Memoir sur L'Administration de M. Necker, par lui même*, p. 367, where he says, with the true ignorance of the prohibitory system, “Mon système sur l'exportation des grains est infiniment simple, ainsi que j'ai eu souvent l'occasion de le développer; il se borne à n'en avoir aucun d'immuable, mais à défendre ou permettre cette exportation selon le temps & selon les circonstances.” When a man starts upon a rotten foundation, he is sure to flounder in this manner; the simplicity of a system to be new-moulded every moment, “selon le temps & selon les circonstances!” And who is to judge of these seasons and circumstances? A minister? A government? These, it seems, are to promulgate laws, in consequence of their having made inquiries into the state of crops and stocks on hand. What presumption; what an excess of vanity must it be, which impels a man to suppose, that the truth is within the verge of such inquiries; or,
that

September 1788, that all the mischief was derived. They pervaded the whole kingdom, and spread an universal alarm; the price in consequence arose; and when once it rises in France, mischief immediately follows, because the populace, by their violence, render the internal trade insecure and dangerous. The business of the minister was done in a moment; his consummate vanity, which, from having been confined to his character as an author, now became the scourge of the kingdom, prohibited the export for no other reason, than because the Archbishop of Sens had the year before allowed it, in contradiction to that mass of errors and prejudices which M. Necker's book upon the corn trade had disseminated. It is curious to see him, in his *Memoire instructif*, asserting, that France, in 1787, *etoit livrée au commerce des grains dans tout le royaume, avec plus d'activité, que jamais & l'on avoit envoye dans l'étranger une quantité considerable de grains*. Now, to see the invidious manner in which this is put, let us turn to the register of the *Bureau General de la balance du Commerce*, where we shall find the following statement of the corn-trade for 1787:

that he is one line, one point nearer to it, after he has made them than before he began. Go to the Intendant in France, or to the Lord Lieutenant in England, and suppose him to receive a letter from government directing such inquiries;—pursue the intelligence,—follow him to his table for conversation on crops,—or in his ride among the farmers (an idea that may obtain in England, but never was such a ride taken by an Intendant in France) in order to make inquiries; mark the desultory, broken, and false specimens of the intelligence he receives,—and then recur to the *simplicity* of the system that is to be founded on such inquiries. Monf. Necker writes as if we were ignorant of the sources of his information. He ought to have known, that ministers can never procure it; and that they cannot be so good an authority for a whole kingdom, as a country gentleman, skilled in agriculture, is for his own parish; yet what gentleman would presume to pronounce upon a crop to the 360th part of its amount, or even to the 20th? But it must be observed, that all Monf. Necker's *simple* operations, which caused an unlimited import, at an unlimited expence, affected not one 200th part of a year's consumption by the people, whose welfare he took upon him to superintend. If this plain fact—the undoubted ignorance of every man what the crop is, or has been, in such fractions as $\frac{1}{20}$, $\frac{1}{30}$, $\frac{1}{40}$, and much more $\frac{1}{200}$, be well considered, it will surely follow, that an absolute and unbounded liberty in the corn trade is infinitely more likely to have effect, than such paltry, deceitful, and false inquiries as this minister, with his system of complex *simplicity*, was forced, according to his own account, to rely upon. Let the reader pursue the passage, p. 369, the *prévoyance* of government—*application*—*hâter le mouvement du commerce*—*attire prochain*—*calculs*. A pretty support for a great nation! Their subsistence is to depend on the combination of a visionary declaimer, rather than on the industry and energy of THEIR OWN exertions. Monf. Necker's performance deserves an attentive perusal, especially when he paints pathetically the anxieties he suffered on account of the want of corn. I wish that those who read it would only carry in their minds this undoubted fact, that the scarcity which occasioned those inquietudes was absolutely and solely of his own creating; and that if he had not been minister in France, and that government had taken no step whatever in this affair, there would not have been such a word as scarcity heard in the kingdom. He converted, by his management, an ordinarily short crop into a scarcity; and he made that scarcity a famine; to remedy which, he assumes so much merit, as to nauseate a common reader.

<i>Imports.</i>		<i>Exports.</i>	
Wheat,	- 8,116,000 liv.	Corn,	- 3,165,600 liv.
Rice,	- 2,040,000	Wheat,	- 6,559,900
Barley.	- 375,000	Legumes,	- 949,200
Legumes,	- 945,000		<hr/>
	<hr/> 11,476,000		10,674,700

This account shews pretty clearly how well founded the minister was, when he attempted to throw on the wise measure of his predecessor the mischiefs which arose from his own pernicious prejudices alone; and how the liberty of commerce, which had taken place most advantageously in consequence of the free trade in 1787, had been more an import trade than an export one; and, of course, it shews, that when he advised his sovereign to prohibit that trade, he acted directly contrary even to his own principles; and he did this at the hazard of raising a general alarm in the kingdom, which is always of worse consequence than any possible export. His whole conduct, therefore, was one continued series of such errors, as can, in a sensible man, be attributed only to the predominant vanity that instigated him to hazard the welfare of a great nation to defend a treatise of his own composition. But as this minister thought proper to change the system of a natural export and import; and to spread, by his measures, an alarm amongst the people, that seemed to confirm their own apprehensions, let us next examine what he did to cure the evils he had thus created. He imported, at the enormous expence of 45,543,697 liv. (about 2,000,000 sterling) the quantity of 1,404,465 quintaux of corn of all sorts, which, at 240lb. make 585,192 septiers, sufficient to feed no more than 195,064 people a year. At three septiers per head, for the population of 26 millions of mouths, this supply, thus egregiously boasted of, would not, by 55,908 septiers, feed France even for three days; for her daily consumption is 213,700 septiers: nor have I the least doubt of more persons dying of famine, in consequence of his measures, than all the corn he procured would feed for a year*. So absolutely contemptible is all importation as a remedy for famine! and so utterly ridiculous is the idea of preventing your own people from being starved, by allowing an import, which, in its greatest and most forced quantities, bears so trifling a proportion to the consumption of a whole people, even when bribed, rather than bought from every country in Europe! But a conclusion of much greater importance is to be deduced from these curious facts, in the most explicit confirmation of the preceding principles, that all *great* variations in the price of corn are engendered by apprehension, and do not depend on the quantity in the markets. The report

* At a moment when there was a great stagnation in every sort of employment, a high price of bread, instead of a moderate one, must have destroyed many; there was no doubt of great numbers dying for want in every part of the kingdom. The people were reduced in some places to eat bran and boiled grass. *Journal de l'Alp Nat.* tom. i.

of Monsr. Necker's measures, we have found, did not sink, but raised the price: providing France with less than three days bread, when blazed forth with all the apparatus of government, actually RAISED the price in the markets, where I was a witness, 25 per cent. Of what possible consequence was three days provision added to the national stock, when compared with the misery and famine implied—and which actually took place in consequence of pushing the price up so enormously, by Monsr. Necker's measures? Would it not have been infinitely wiser never to have stopped the trade, which I have proved to have been a trade of import?—Never to have expressed any solicitude?—Never to have taken any public steps, but to have let the demand and supply quietly meet, without noise and without parade? The consequence would have been, saving 45 millions of the public money, and the lives of some hundred thousands, starved by the high price that was created, even without a scarcity; for I am firmly persuaded, that if no public step whatever had been taken, and the Archbishop of Sens' edict never repealed, the price of wheat in no part of France would have seen, in 1789, so high a rate as 30 liv. instead of rising to 50 and 57 liv. If there is any truth in these principles, what are we to think of the first minister hunting after a little popularity, and boasting in his *Memoire*, that the King allowed only bread of wheat and rye mixed to be served at his own table? What were the conclusions to be looked for in the people, but that if such were the extremities to which France was reduced, all were in danger of death for want of bread. The consequence is palpable;—a blind rage against monopolizers, hanging bakers, seizing barges, and setting fire to magazines; and the inevitable effect of a sudden and enormous rise in the price, wherever such measures are precipitated by the populace, who never are truly active but in their own destruction. It was the same spirit that dictated the following passage, in that *Memoire instructif*, “Les accaparemens sont la premiere cause à laquelle la multitude attribue la cherté des grains, & en effet on souvent eu lieu de se plaindre de la cupidité des speculateurs*.” I cannot read these lines, which are as untrue in fact as erroneous in argument, without indignation. The multitude NEVER have to complain of speculators; they are ALWAYS greatly indebted to them. THERE IS NO SUCH THING AS MONOPOLIZING CORN BUT TO THE BENEFIT OF THE PEOPLE†. And all the evils of the year

* This is pretty much like his sending a memoir to the National Assembly, which was read October 24, in which the ministers says, “Il est donc urgent de défendre de plus en plus l'exportation en France; mais il est difficile de veiller à cette prohibition. On a fait placer des cordons de troupes sur les frontières à cette effet.” *Journal des Etats Généraux*, tom. v. p. 194. Every expression of this nature becoming public, tended to inflame the people, and consequently to raise the price.

† I am much inclined to believe, that no sort of monopoly ever was, or ever can be injurious, without the assistance of government; and that government never tends in the least to favour a monopoly.

year 1789 would have been prevented, if monopolizers, by raising the price in the preceding autumn, and by lessening the consumption, had divided the supply more equally through the year. In a country like France, subdivided mischievously into little farms, the quantity of corn in the markets in autumn is always beyond the proportion reserved for supplying the rest of the year: of this evil, the best remedy is, enlarging the size of farms; but when this does not take place, the dealings of monopolizers are the only resource. They buy

monopoly without doing infinite mischief. We have heard in England of attempts to monopolize hemp, allum, cotton, and many other articles; ill-conceived speculations, that always ended in the ruin of the schemers, and eventually did good, as I could shew, if this were the proper place. But to monopolize any article of common and daily supply and consumption to a mischievous degree, is absolutely impossible: to buy large quantities, at the cheapest season of the year, in order to hoard and bring them out at the very dearest moment, is the idea of a monopolizer or *accapareur*: this is, of all other transactions, the most beneficial towards an equal supply. The wheat which such a man buys is cheap, or he would not buy it with a view to profit: What does he then? He takes from the market a portion, when the supply is large; and he brings that portion to the market when the supply is small; and for doing this you hang him as an enemy. Why? Because he has made a private profit, perhaps a very great one, by coming in between the farmer and the consumer. What should induce him to carry on his business, except the desire of profit? But the benefit of the people is exactly in proportion to the greatness of that profit, since it arises directly from the low price of corn at one season, and the dearth of it at another. Most clearly any trade which tends to level this inequality is advantageous in proportion as it effects it. By buying great quantities when cheap, the price is raised, and the consumption forced to be more sparing: this circumstance can alone save the people from famine; if, when the crop is scanty, the people consume plentifully in autumn, they must inevitably starve in summer; and they certainly will consume plentifully if corn is cheap. Government cannot step in and say, you shall now eat half a pound of bread only, that you may not by-and-by be put to half an ounce. Government cannot do this without erecting granaries, which we know, by the experience of all Europe, is a most pernicious system, and done at an expence which, if laid out in premiums, encouraging cultivation, would convert deserts into fruitful corn-fields. But private monopolizers can and do effect it; for by their purchases in cheap months they raise the price, and exactly in that proportion lessen the consumption; this is the great object, for nothing else can make a short crop hold out through the year; when once this is effected, the people are safe; they may pay very dear afterwards, but the corn will be forth coming, and they will have it though at a high price. But reverse the medal, and suppose no monopolizers; in such a case, the cheapness in autumn continuing, the free consumption would continue with it: and an undue portion being eaten in winter, the summer would come without its supply: this was manifestly the history of 1789; the people enraged at the idea of monopolizers, not at their real existence (for the nation was starving for want of them), hung the miserable dealers, on the idea of their having done what they were utterly unable to do. Thus, with such a system of small farms as empty the whole crop into the markets in autumn, and make no reserve for summer, there is no possible remedy, but many and great monopolizers, who are beneficial to the public exactly in proportion to their profits. But in a country like England, divided into large farms, such corn dealers are not equally wanted; the farmers are rich enough to wait for their returns, and keep a due reserve in stacks to be threshed in summer; the best of all methods of keeping corn, and the only one in which it receives no damage.

when

when corn is cheap, in order to board it till it is dear; this is their speculation, and it is precisely the conduct that keeps the people from starving; all imaginable encouragement should be given to such merchants, whose business answers every purpose of public granaries, without any of the evils that are sure to flow from them *. It may easily be conceived, that in a country where the people live almost entirely on bread, and the blind proceedings of mobs are encouraged by arrears of parliaments, seconded by such blunders of government as I have described, and unaided by the beneficial existence of real monopolizers; it may easily be conceived, I say, that the supply must be irregular, and in many instances insufficient: it must be insufficient, exactly in proportion to the violence of the populace; and a very high price will be the unavoidable consequence, whatever may be the quantity in the kingdom. In June and July 1789, the markets were not opened, before troops arrived to protect the farmers from having their corn seized; and the magistrates, to avoid insurrections among the people, set the assize too low upon corn, bread, and butcher's meat; that is, they fixed the prices at which they were to be sold, which is a most pernicious regulation. The farmers, in consequence, refrained from going to market, in order to sell their wheat at home at the best price they could get, which was of course much higher than the assize of the markets. How well these principles, which such ample experience proves to be just, are understood in France, may be collected from the *cabiers*, many of whom demand measures which, if really pursued, would spread absolute famine through every province in the kingdom. It is demanded at one place, "that as France is exposed to the rigours of famine, every farmer should be obliged to register his crop of every kind, gerbs, bottes, muids, &c.; and also every month the quantity sold ‡." Another requires, "that export be severely prohibited, as well as the circulation from province to province; and that importation be always allowed §." A third ||, "that the severest laws be passed against monopolizers; a circumstance, which at present desolates the kingdom." A system of prohibition of export is demanded by no less than twelve *cabiers* **. And fifteen demand the erection of public maga-

* Well has it been observed by a modern writer, "Lorsque les récoltes manquent en quelque lieu d'un grand empire, les travaux du reste de ses provinces étant payés d'une heureuse fécondité suffisent à la consommation de la totalité. Sans sollicitude de la part du gouvernement, sans magasins publics, par le seul effet d'une communication libre & facile on n'y connoit ni disette ni grande cherté. *Theorie de Luxe*, tom. i. p. 5.

p. 438.

‡ *Tier Etat de Meudon*, p. 36. § *Tier Etat de Paris*, p. 43. || *Tier Etat de Reims*, art. 110.

** *Nob. de Quesnoy*, p. 24. *Nob. de St. Quintin*, p. 9. *Nob. de Lille*, p. 20. *T. Etat de Reims*, p. 20. *T. Etat de Rouen*, p. 43. *T. Etat de Dunkerque*, p. 15. *T. Etat de Metz*, p. 46. *Clergé de Rouen*, p. 24. *T. Etat de Rennes*, p. 65. *T. Etat de Valenciennes*, p. 12. *T. Etat de Troyes*, art. 96. *T. Etat de Dourdon*, art. 3.

zines *. Of all solecisms, none ever equalled Paris demanding that the transport of corn from province to province should be prohibited. Such a request is really edifying, by offering to the attention of the philosophical observer, mankind under a new feature, worthy of the knowledge and intelligence that ought to reign in the capital of a great empire; and Mons. Necker was exactly suited to be minister in the corn department of such a city!—The conclusions to be drawn from the whole business, are evident enough. There is but one policy which can secure a supply with entire safety to a kingdom so populous and so ill † cultivated as France, with so large a portion of its territory under wood and vines; the policy I mean is an entire and absolute liberty of export and import at all times, and at all prices, to be persisted in with the same unremitted firmness, that has not only rescued Tuscany from the jaws of periodical famines, but has given her eighteen years of plenty, without the intervention of a moment's want. A great and important experiment! and if it has answered in such a mountainous, and, on comparison with France, a barren territory, though full of people, assuredly it would fulfil every hope, in so noble and fertile a kingdom as France. But to secure a regular and certain supply, it is necessary that the farmer be equally secure of a steady and good price. The average price in France vibrates between 18 and 22 liv. a septier of 24 lb. ‡. I made inquiries

* I have lately seen (January, 1792), in public print, the mention of a proposal of one of the ministers to erect public magazines; there wants nothing else to complete the system of absurdity in relation to corn which has infested that fine kingdom. Magazines can do nothing more than private *accapareurs*; they can only buy when corn is cheap, and sell when it is dear; but they do this at such a vast expence, and with so little œconomy, that if they do not take an equal advantage and profit with private speculators, they must demand an enormous tax to enable them to carry on their business; and if they do take such profit, the people are never the better for them. Mr. Symonds, in his paper on the public magazines of Italy, has proved them to be every where nuisances. See *Annals of Agriculture*, vol. xiii. p. 299, &c.

† The assertion of the marquis de Cassaux, "that the free corn trade established by Mons. Turgot, increased the productions of the agriculture of France as 150 to 100" (*Seconde Suite de Consid. sur les Mech. des Soc.* p. 119.), must be received with great caution. That of Mons. Millot, "that the lands of the same kingdom produced five times as much in Henry IV.'s reign as they do at present," is a very gross error, irreconcilable with the least degree of probability. *Elem. de l'Hist. Gen.* t. ii. p. 488.

‡ Price of Wheat at Paris, or at Rosoy, for 146 years.

Price of 73 Years, the Reign of Louis XIV.

	Liv.	Sol.	Den.
From 1643 to 1652	35	14	1
1653 to 1662	32	12	2
1663 to 1672	23	6	11
1673 to 1682	25	13	8
1683 to 1692	22	0	4
1693 to 1702	31	16	1
1703 to 1712	23	17	1
1713 to 1715	33	1	6
General Average	28	1	5

De la Balance du Commerce, tom. 3.

Price of 73 Years, the Reigns of Louis XV. and XVI.

	Liv.	Sol.	Den.
From 1716 to 1725	17	10	9
1726 to 1735	16	9	4
1736 to 1745	18	15	7
1746 to 1755	18	10	11
1756 to 1765	17	9	1
1766 to 1775	28	7	9
1776 to 1785	22	4	7
1786	20	12	6
1787	22	2	6
1788	24	0	•

General average 20 1 4

through

through many provinces in 1789, into the common price, as well as that of the moment, and found (reducing their measures to the septier of 240lb.), that the mean price in Champagne is 18 liv.; in Lorraine 17½; in Alsace 22 liv.; in Franche Comté 20 liv.; in Bourgogne 18 liv.; at Avignon, &c. 24 liv.; at Paris, I believe, it may be calculated at 19 liv.—Perhaps the price, through the whole kingdom, would be found to be about 20 liv. Now, without entering into any analysis of the subject, or forming any comparison with other countries, France ought to know, at least she has dearly learned from experience, that this is not a price sufficient to give such encouragement to the farmers as to secure her a certainty of supply: no nation can have enough without a surplus; and no surplus will ever be raised, where there is not a free corn trade.—The object, therefore, of an absolutely free export, is to secure the home supply. The mere profit of selling corn is no object: it is less than none; for the right use thereof is to feed your own people. But they cannot be fed, if the farmers have not encouragement to improve their agriculture; and this encouragement must be the certainty of a good price. Experience has proved sufficiently, that 20 liv. will not do. An absolute freedom of interior circulation is obviously necessary, that to name it is sufficient*.

A great and decided encouragement to monopolizers † is as necessary to the regular supply, as that seed should be sown to procure a crop; but reaping, in order to load the markets in winter, and to starve the people in summer, can be remedied by no other person but an *accapareur*. While such men are therefore objects of public hatred; while even laws are in force against them (the most preposterous that can disgrace a people, since they are made by the mouth, against the hand for lifting food to it), no regular supply can be looked for.—We may expect to see famine periodical, in a kingdom governed by the principles which must take place, where the populace rule not by enlightened representatives, but by the violence of their ignorant and unmanageable wills. Paris governs the National Assembly; and the mass of the people, in great cities, are all alike absolutely ignorant how they are fed; and whether the bread they eat be gathered like acorns from a tree, or rained from the clouds, they are well

* The internal shackles on the corn trade of France, are such as will greatly impede the establishment of that perfect freedom which alone forms the proper regulation for such a country. M. Turgot, in his *Lettres sur les Grains*, p. 126, notices a most absurd duty at Bourdeaux, of 20*s.* per septier on all wheat consumed there, or even deposited for foreign commerce, a duty which ought to have prevented the remark of the author of *Credit National*, p. 222, who mentions, as an extraordinary fact, “that at Toulouse there is a duty of 12*s.* per septier on grinding, yet bread is cheaper there than at Bourdeaux.” Surely it would be so; it ought to be 8*s.* the septier cheaper.

† The word *speculator*, in various passages of this chapter, would be as proper as *monopolizer*, they mean the same thing as *accapareur*; a man who buys corn with a view to selling it at a higher price; whatever term is used, the thing meant is every where understood.

convinced, that God Almighty sends the bread, and that they have the best possible right to eat it. The courts of London, aldermen and common councilmen, have, in every period, reasoned just like the populace of Paris*. The present system of France, relative to agriculture, is curious,

To encourage investments in land,
I. TAX IT THREE HUNDRED MILLIONS.

To enable the land to pay it,
II. PROHIBIT THE EXPORT OF CORN.

That cultivation may be rich and spirited,
III. ENCOURAGE SMALL FARMS.

That cattle may be plentiful,
IV. FORBID THE INCLOSURE OF COMMONS.

And that the supply of the markets may be equal in summer as in winter,
V. HANG ALL MONOPOLIZERS.

Such may be called the agricultural code of the new government of France†.

CHAP.

* Aldermen, common councilmen, and mobs, are consistent when they talk nonsense; but philosophers are not so easily to be pardoned; when M. L'Abbè Rozier declares, "que la France recolté année ordinaire près du double plus de bled qu'elle n'en consomme," (*Recueil de Mémoires sur la Culture & le Rouissage du chavvre*, 8vo. 1787. p. 5.) he wrote what has a direct tendency to inflame the people; for the conclusion they must draw is, that an immense and incredible export is always going on. If France produces in a common year double her consumption, what becomes of the surplus? Where are the other 26 millions of people that are fed with French corn? Where do the 78,000,000 of septiers go that France has to spare; a quantity that would load all the ships possessed by that kingdom above thirty times to carry it. Instead of the common crop equalling two years consumption, it certainly does not equal thirteen months common consumption; that is, such a consumption as takes place at an average price. And all the difference of crops is, that consumption is moderate with a bad product, and plentiful with a good one. The failure of a crop in one province in a very small degree, which, under a good government, and entire liberty of trade, would not even be felt, will, under a system of restrictions and prohibitions, raise the price through the whole kingdom enormously; and if measures are taken to correct it by government, they will convert the high price into a famine. The author of *Traité d'économie Politique*. 8vo. 1783, p. 592, does not talk quite so greatly, when he says a good crop will feed France a year and a half; but pretty near it. The absurdities that daily appear on this subject are astonishing. In a work now publishing, it is said, that a moderate crop furnishes England for three years, and a good one for five. *Encyclopædie Methodique Economie Pol.* pt. i. tom. i. p. 75. This assertion is copied from an Italian, viz. *Zanoni dell' Agricoltura*, 1763. 8vo. tom. i. p. 109, who took it verbatim from *Essais sur divers sujets intéressans de politique et de morale*, 8vo. 1760. p. 216. It is thus that such nonsense becomes propagated, when authors are content to copy one another, without knowledge or consideration.

much.

C H A P. XVIII.

Of the Commerce of France.

AGRICULTURE, manufactures, and commerce, uniting to form what may be properly termed the mass of national industry, are so intimately connected in point of interest, under the dispensations of a wise political system, that it is impossible to treat amply of one of them, without perpetually recurring to the others. I feel, in the progress of my undertaking, the impossibility of giving the reader a clear idea of all the interests of French agriculture, without inserting, at the same time, some details of manufactures and commerce. The opportunities I possessed of gaining some valuable intelligence, enable me to insert several accounts hitherto unpublished, which I believe my commercial readers (should I have any such), will not be displeased to examine.

Imports into France in 1784.

	liv.		liv.		liv.
Woods, - - -	216,200	Kelp, - - -	50,700	Hemp, - - -	4,385,300
Timber, - - -	1,866,800	Peat ashes for manure, - -	665,100	Hemp and flax thread, -	2,091,100
Hoops, &c. - - -	92,100	Grains, - - -	141,500	Thread of refuse silk, -	55,800
Staves, - - -	628,500	Millet and Canary, - -	51,400	Various wools, - - -	25,925,000
Planks, - - -	2,412,000	Flax-seed, - - -	612,600	Spun ditto, - - -	119,400
Pitch and tar, - - -	825,200	Hops, - - -	272,400	Vigonia ditto, - - -	259,800
Ashes, - - -	1,372,600	Tallow loaves, - - -	1,133,400	Flax, - - -	1,109,500
Soda and pot-ash, - - -	3,873,900	Refuse of silk, - - -	94,900	Silk raw, - - -	29,582,700

Manufactured Goods.

Mercery, thread, & boneterie, 335,500	Table linen, - - - 99,200	Dresses, - - - 93,200
Woollen stuffs, - - - 81,300	Linen called <i>platile</i> , - - - 602,100	Oil of grain, - - - 248,300
Ditto silk, - - - 430,700	— <i>treilis</i> , - - - 892,700	Corks, - - - 219,300
Bours d'oeff, - - - 252,200	— <i>coutis</i> hemp, - - - 432,000	— in plank, - - - 97,100
Silk gauzes, - - - 54,700	Sail cloth, - - - 157,700	Skins, - - - 873,400
Silk handkerchiefs, - - - 115,900	Candles, - - - 50,300	— goats and kids, - - - 148,400
Silk ribbons, - - - 374,100	Yellow wax, - - - 1,317,900	— calves, - - - 115,200
Ribbons of wool, - - - 87,500	Cordage, - - - 99,000	— hares and rabbits, - - - 78,600
Thread ribbons, - - - 1,406,100	Horse-hair, - - - 59,000	Quills, - - - 143,900
Ribbons of thread and wool, - - - 92,700	Raw hides, - - - 2,805,400	Bed feathers, - - - 81,700
Linen, flax, & hemp, mix. d, 1,918,600	Distilled waters and oils, - - - 87,500	Hog and wild boar hair, - - - 148,400
Linen of flax, - - - 4,849,700	Essences, - - - 126,500	Coaches, - - - 783,900

Edibles.

	liv.		liv.		liv.
Almonds,	140,600	Legumes,	550,900	Hogs,	276,100
Butter,	380,100	Vermicelli,	287,200	Cows and bulls,	1,264,800
Salt beef,	1,716,400	Salt,	113,800	Calves,	89,300
Salt pork,	181,600	Various edibles,	90,800	Horses,	2,052,900
Cheese,	3,352,700	Beer,	383,500	Mules,	148,400
Fruits,	238,100	Brandy of wine,	1,151,900		
Lemons and oranges, &c. (in		— corn,	1,086,900		
No. 17,543,000),	731,000	Liqueurs and lemon juice,	62,900		
Sweetmeats,	52,600	Various wines,	684,900		
Dried fruits and figs,	254,600	Defert wines,	362,200		
Dried grapes,	248,300				
Wheat,	5,347,900				
Rye,	139,800				
Barley,	163,800				
Oil of Olives,	25,615,700				

Livestock.

Cattle of all sorts,	31,800
Oxen,	1,355,200
Sheep,	1,087,000

Drugs.

Liquorice juice,	67,300
Gaul nuts,	313,000
Madder,	476,600
Roots of Allifary,	226,300
Saffranam,	578,700
Shumac,	73,200
Turnsole,	87,600
Tobacco leaf,	5,993,100

Exports the same Year.

Various woods,	89,600	Linen of flax and hemp		Butter,	118,400
Plank,	66,300	mixed,	12,437,200	Salt meat,	121,400
Pitch and tar,	255,700	— flax,	1,727,800	Flour,	1,271,500
Common ashes,	152,000	— fine,	346,300	Cheese,	144,100
Charcoal,	70,600	Cambric and linen,	6,173,200	Various fruits,	279,000
Coals,	419,000	Linen of thread and cotton,	291,400	Raw ditto,	131,500
Grains,	148,900	— siamois,	1,047,600	Dried ditto,	69,600
Coleseed,	144,900	— hemp,	344,300	Prunes dried,	791,700
Garden-seeds,	75,700	Candles,	78,700	Grapes,	324,200
Flax-seed,	248,900	Wax,	449,800	Wheat,	2,608,300
Bours of silk,	94,700	Wax candles,	90,400	Rye,	239,400
Hemp,	47,200	Woollen blankets,	129,800	Mellin and Maiz,	52,700
Thread of flax and hemp,	143,400	Raw leathers,	96,300	Indian corn,	633,100
Wool,	1,576,300	Prepared leathers,	304,500	Barley,	321,100
Silk,	2,657,600	Leather curried,	137,700	Legumes,	558,600
Boneterie of thread, &c.	175,100	— tanned,	698,100	Oil of olives,	1,346,100
— filofel,	83,400	Distilled water and oils,	167,500	Honey,	361,800
Woollen stockings,	365,500	Gloves of Skins,	63,900	Eggs,	75,200
Wool n caps,	413,100	— Grenoble,	491,700	Salt,	2,189,800
Boneterie of silk,	3,375,100	Dresses,	131,100	Wine brandy,	11,035,200
Hats,	86,200	Oil of grains,	368,100	Corn ditto,	1,045,500
Boneterie of hair and wool,	910,300	Corks,	65,500	Liqueurs,	205,300
Silk laces,	2,589,200	— in plank,	110,600	Wines,	6,807,900
Laces of thread and silk,	445,300	Cabinet ware,	65,700	Wines of Bourdeaux,	16,150,900
Woollen cloth,	15,530,900	Willow ware,	54,800	Vinegar,	124,400
Various stuffs,	122,300	Cole seed cakes,	547,600	Cattle,	108,600
Woollen stuffs,	7,491,300	Parchment,	76,100	Oxen (No. 7659),	1,088,200
Stuffs of thread and wool,	109,300	Perfumery,	196,100	Sheep (No. 104,990),	1,017,200
— hair,	3,655,700	Various skins,	123,500	Hogs,	965,800
— hair and wool,	633,600	Skins of goats and kids,	156,800	Cows and bulls,	227,000
— rich in gold,	1,538,500	— calves prepared,	448,600	Horses,	455,700
Silk stuffs,	14,834,100	— sheep ditto,	312,500	Mules,	1,509,000
Stuffs mixed with silk,	649,600	— calves curried,	1,571,100	Saffron,	239,200
Silk gauzes,	5,452,000	— sheep and calves tan-		Oil of terebinth,	46,000
Thread and silk gauzes,	209,000	ned,	256,000	Terebinth,	128,400
Thread and cotton handker-		Feathers prepared,	54,600	Verdigrife,	266,300
chiefs,	405,800	Soap,	1,376,700	Tobacco leaf,	418,400
Silk handkerchiefs,	118,000	Various edibles,	49,100	— rappé,	653,100
Silk ribbons,	1,231,900	Almonds,	450,800		

N. B. The provinces of Loraine, Alsace, and the three bishoprics, are not included in this account, nor any export or import to or from the West Indies.

Total export,	307,151,700 liv.
— import,	271,365,000

Balance, 35,786,700 £. 1,565,668 sterling.

Imports.

COMMERCE.

501

Imports into France in 1787.

	liv.		liv.		liv.
Steel from Holland, Switzerland, and Germany,	862,000	Garden seeds, flax, and millet,	1,115,000	Skins not prepared,	1,180,000
Copper,	7,217,000	Madder and roots of Allifary,	962,000	Goat's hair from Levant,	1,137,000
Tin from England,	885,000	Wheat,	8,116,000	Bristles of hogs and wild boars,	275,000
Iron from Sweden and Germany,	8,469,000	Rice,	2,040,000	Tallow,	3,111,000
Brafs from ditto,	1,175,000	Barley,	375,000	Raw wool,	20,884,000
Lead from England and the Hanfiatic towns,	2,242,000	Legumes,	945,000	Woollen stuffs,	4,325,000
Steel manufactures from Germany and England,	4,927,000	Fruits,	3,060,000	Raw silk,	28,266,000
Coals from England, Flanders, and Tuscany,	5,674,000	Butter,	2,507,000	Silk manufactures,	4,154,000
Woods from the Baltic,	5,408,000	Salt beef and pork,	2,960,000	Flax,	6,056,000
Woods <i>feuillard & mercin</i> ,	1,593,000	Cheese,	4,522,000	Linens of flax,	11,955,000
Cork from Spain,	262,000	Oil of olives,	16,645,000	Hemp,	5,040,000
Pitch and tar,	1,557,000	Brandy of corn,	1,874,000	Linen of hemp,	6,544,000
Ashes, soda, and pot-ash,	5,762,000	— of wine,	3,715,000	Cotton from the Brazils, the Levant, and Naples,	16,494,000
Yellow wax,	2,260,000	Wines,	1,489,000	Cotton manufactures,	13,448,000
		Beer,	469,000	Tobacco,	14,142,000
		Oxen, sheep, and hogs,	6,646,000	Drugs, spices, glass, pottery, books, feathers, &c. &c.	61,820,000
		Horses and mules,	2,911,000		
		Raw hides,	2,707,000		

Exports in the same Year.

Timber and wood of all sorts,	166,300	Spirit of wine,	144,700	Brandy of wine (114,044 muids),	14,455,600
Pitch and tar,	317,100	Essences,	10,000	Liqueurs,	234,000
Ashes for manure,	59,400	Staves,	22,800	Wines in general (159,222 muids),	8,558,200
Charcoal,	31,300	Gloves,	428,900	— Bourdeaux (201,246 muids),	17,718,100
Vetch hay,	12,000	Linfed-oil,	174,800	— Vin de liqueurs,	10,000
Garden seeds, flax-seed, &c.	988,500	Corks,	139,000	Vinegar,	130,900
Grease,	17,300	Colofeed oil cakes	449,500	Oxen, hogs, sheep, &c.	5,074,200
Hops,	105,600	Shee, roebuck, and calve-skins tanned,	2,705,200	Mules, horses, asses,	1,453,700
Tallow-loaves,	145,600	Feathers for beds,	51,100	Juice of lemons,	60,000
Cocoon silk refuse,	41,500	Soap,	1,752,800	— liquorice,	35,500
Threads of all sorts,	241,800	Almonds,	850,500	Liquorice,	24,600
Hemp,	117,100	Butter,	88,600	Saffron,	214,900
Wool, raw and spun,	4,378,905	Salted meat,	487,700	Roots of Allifary,	1,500
Flax,	22,800	Preserved fruits,	1,518,600	Salt of tartar,	14,900
Rabbzits wool,	10,400	Corn of all sorts, except hereafter named,	3,165,600	Shumac,	10,200
Silk,	628,000	Wheat,	6,559,900	Terebinth,	33,100
Starch,	32,200	Legumes,	949,200	Turnsole,	12,200
Caudles,	131,900	Olive oil,	1,732,400	Verdigrise,	512,400
Horses,	42,100	Honey,	644,600	Cloth,	14,242,400
Wax,	307,800	Eggs,	99,800	Woollen stuffs,	5,615,800
Cordage,	268,000	Salt,	2,322,500	Cotton, linen, cambric, &c.	19,632,000
Tanned leather,	1,280,300	Poultry,	35,700	Of this cambric, 5,230,000 liv.	
Raw leather,	116,000	Cyder,	17,500		
Distilled waters and oils,	162,500				
Pigeon's dung,	37,000				

Total exports, including the articles not here minuted, 349,725,400 liv.
 — imports, 310,184,000

Balance, 39,541,400 £. 1,729,936 sterling.

Explanation.—The contraband trade of export and import has been calculated, and the true balance found to be about 25,000,000 liv. (1,093,750l.); the provinces of Lorraine, Alsace, the three bishoprics, and the West-Indies, not included.

Observations.

Observations.

The preceding accounts of the trade of France, for these two years, are correct in all probability in the articles noted; but that they are imperfect there is great reason to believe. In 1787 there is an import of raw metals to the amount of above 20 millions: but in the account of 1784 there is no such article in the list, which is plainly an omission. And though coals are among the exports in 1784, there are none in the imports, which is another omission. In the manufactured articles also are various omissions, not easily to be accounted for, though the treaty of commerce explains some articles, as that of cotton manufactures, &c.: the idea to be formed of the exports and imports of France should be gathered from an union of the two, rather than from either of them separate. No idea, thus to be gained or acquired by any other combinations, will allow for one moment the possibility of a balance of commerce of 70,000,000 liv. (3,062,500l.) in favour of France, which Monf. Necker has calculated it to be, in his book, *De l'Administration des Finances*, and which calculation the Marquis de Castaux, in his *Mechanism des Sociétés*, has refuted in an unanswerable manner. It will be curious to examine what is the amount of the imports of the produce of land, minerals excluded.

In 1784 the imports of the produce of land amounted to,

	liv.
Wool, - - -	25,925,000
Silk, - - -	29,582,700
Hemp and flax, - -	5,494,800
Oil, - - -	25,615,700
Live stock and its produce, -	18,398,400
Corn, - - -	5,651,500
Sundries, - - -	24,860,700
	<hr/>
	135,558,800

In 1787 the same articles are,

	liv.
Wool, - - -	20,884,000
Silk, - - -	28,266,000
Hemp and flax, - -	11,096,000
Oil, - - -	16,645,000
Live stock, - - -	29,079,000
Corn, - - -	11,476,000
Tobacco, - - -	14,142,000
Sundries, - - -	24,206,000
	<hr/>
	155,794,000

She may be said, therefore, to import in a common year about 145,000,000 liv. (6,343,750l.) of agricultural products: and these imports are a striking proof, that I was not wide of the truth when I condemned so severely the rural œconomy of France in almost every particular, the culture of vines alone excepted. For the country, of all Europe the best adapted by nature to the production of wool, to import so immensely, shews how wretchedly they are understocked with sheep; and how much their agriculture suffers for want of the fold of these five or six millions, in which they are deficient even for their own demand. The import of such great quantities of other sorts of live stock also speaks the same language. Their husbandry is weak and languishing in every part of the kingdom, for want of larger stocks of cattle, and the national demands

mands cannot be supplied. In this trade of live stock there is, however, one circumstance which does the highest honour to the good sense and policy of the old French government; for though wool was so much wanted for their fabrics, and many measures were taken for increasing sheep and improving the breed, yet was there no prohibition on the export either of live sheep or wool, nor any duty farther than for ascertaining the amount. It appears that they exported above 100,000 sheep annually; and this policy they embraced, not for want of experience of any other (for the export was prohibited for many years), but finding it a discouragement to the breed, they laid the trade open, and the same plan has been continued ever since; by this system they are sure that the price is as high in France as amongst her neighbours, and consequently that there is all the encouragement to breed which such equality of price can give. The export of woollen manufacture in 1784, amounts to 24,795,800 liv. or not equal to the import of raw wool. On the general account, therefore, France does not supply herself; and the treaty of commerce having introduced many English woollen stuffs, she is at present further removed from that supply. Considering the climate, soil, and population of the kingdom, this state of her woollen trade certainly indicates a most gross neglect. For want of having improved the breed of her sheep, her wools are very bad, and she is obliged to import, at a heavy expence, other wools, some of which are by no means good; and thus her manufactures are under a heavy disadvantage, on account of the low state of agriculture. The steps she has taken to improve her wools, by giving pensions to academicians, and ordering experiments of enquiry upon obvious points, are not the means of improvement. An English cultivator, at the head of a sheep farm of three or four thousand acres, as I observed above, would, in a few years, do more for their wools than all the academicians and philosophers will effect in ten centuries.

BAYONNE. Trade here is various, the chief articles are the Spanish commerce, the Newfoundland fishery, and the coasting trade to Brest, Nantes, Havre, Dunkirk, &c. they have an export of wine and flour, and they manufacture a good deal of table linen. They build merchant ships, and the king has two frigates on the stocks here under slated roofs. Of a merchantman, the workmanship alone amounts to about 15 liv. a ton. They reckon 2000 sailors and fishermen, including the basque men, about sixty-ships of different sizes, belong to the place, eight of which are in the American trade, seventeen in the Newfoundland fishery, of from 80 to 100 tons average, but some much larger; the rest in the Spanish, Mediterranean, and coasting trades. Seamen here are paid in the Newfoundland fishery 36 liv. a month wages, and 1 quintal in 5 of all the fish caught. To Dunkirk 27 liv. to Nantes 45 liv. per voyage; to the Coast of Guinea 50 liv. per month; to Boston and Philadelphia 50 liv. to St. Sebastian 24 liv. the voyage; to Bilboa 36 liv. to St. Andero 40 liv. to Colo-

nia and Ferrol 46 liv. to Lisbon and Cadiz 30 liv. a month, and for three months certain.

BOURDEAUX. All the world knows that an immense commerce is carried on at this city; every part of it exhibits to the traveller's eye unequivocal proofs that it is great; the ships that lye in the river are always too numerous to count easily; I guess there are at present between 3 and 400, besides small craft and barges; at some seasons they amount to 1000 or 1500, as I was assured, but know not the truth of it; I rather question it, as it does not seem absolutely to agree with another account, which makes the number of ships that enter the harbour ten on an average every day; or, as asserted by others, 3000 in a year. It may be sufficient to say, at present, that here are every sign of a great and flourishing trade; crouds of men all employed, busy, and active; and the river much wider than the Thames at London, animated with so much commercial motion, will leave no one in doubt.

Shipbuilding is a considerable article of their trade; they have built sixty ships here in one year; a single builder has had eight of his own on the stocks at a time; at present they reckon the number on an average from 20 to 30; the greater number was towards the termination of the war, a speculation on the effect of peace; there are sixty builders who are registered after undergoing an examination by an officer of the royal navy; they reckon from 2 to 3000 ship-carpenters, but including the river Garonne for many leagues; also 15000 sailors, including those carpenters; the expence of building rises to 5l. a ton, for the hulk, masts, and boats; the rigging and all other articles about 4l. more; thirty-three men, officers and boys included, are estimated the crew for a vessel of 400 tons, eight men for one of 100 tons, and so in proportion; they are paid all by the month from 30 to 36 liv. some few 40 liv. carpenters 40 to 50s. a day, and some 3 liv. there are private ship-owners, whose whole trade consists in the possession of their vessels, which they navigate on freight for the merchants; they have a calculation, that ships last one with another twelve years, which would make the number possessed by the town 300, built by themselves; a number I should apprehend under the truth; the Bretons and Dutch build also for them.

Ships of a larger burthen than 700 tons cannot come up to the town but in spring tides.

The export of wine alone is reckoned to amount to 80,000 tons, besides which brandy must be an immense article.

HAVRE DE GRACE. There is not only an immense commerce carried on here, but it is on a rapid increase; there is no doubt of its being the fourth town in France for trade. The harbour is a forest of masts; they say, a 50 gun ship can enter, I suppose without her guns. They have some very large merchantmen

merchantmen in the Guinea trade of 5 or 600 tons, but by far their greatest commerce is to the West-India sugar islands; they were once considerable in the fisheries, but not at present. Situation must of necessity give them a great coasting trade, for as ships of burthen cannot go up to Rouen, this place is the emporium for that town, for Paris, and all the navigation of the Seine, which is very great.

Sailors are paid 40 liv. a month.

There are thirty Guineamen belonging to the town, from 350 to 700 tons; 120 West-Indiamen; 100 coasting trade; most of them are built at Havre. The mere building a ship of 300 tons is 30,000 liv. but fitted out 60,000 liv.

The increase of the commerce of Havre has been very great in twenty-five years, the expression used was, that every crown has become a louis, and not gained by rivalling other places, but an increase nationally, and yet they consider themselves as having suffered very considerably by the regulations of the Maréchal de Castries, in relation to the colonies; his permitting foreigners to serve them with salt provisions, lumber, &c. opened an immense door to smuggling manufactures in, and sugar out, which France feels severely.

HONFLEUR. The basin full of ships, and as large as those at Havre, I saw some of at least 600 tons.

CHERBOURG. Sailors 36 liv. to 40 liv. a month.

ST. BRIEUX. The ships belonging to this little port are generally of 200 tons, employed in the Newfoundland fisheries, carrying sixty men of all sorts, who are paid not by shares, but wages by the voyage; seamen 200 liv. to 250 liv. and some to 500 liv.

NANTES. The accounts I received here of the trade of this place, made the number of ships in the sugar trade 120, which import to the amount of about 32 millions, 20 are in the slave trade; these are by far the greatest articles of their commerce; they have an export of corn, which is considerable from the provinces washed by the Loire, and are not without minoteries, but vastly inferior to those of the Garonne. Wines and brandy are great articles, and manufactures even from Switzerland, particularly printed linens and cottons, in imitation of Indian, which the Swiss make cheaper than the French fabrics of the same kind, yet they are brought quite across France; they export some of the linens of Bretagne, but not at all compared with St. Maloes, which has been much longer established in that business. To the American States they have no trade, or next to none. I asked if Bourdeaux had it? No. Marseilles? No. Havre? No. Where then is it? *Tout en Angleterre.*

The accounts they give here of the trade to the Sugar Islands is, that Bourdeaux has twice as much of it as Nantes, and Havre to the amount of 25 millions, this will make it,

	liv.		
Bordeaux,	60,000,000	And the proportion of ships,	
Nantes,	30,000,000	Bordeaux,	240
Havre,	25,000,000	Nantes,	120
	<hr/>	Havre,	100
	115,000,000		<hr/>
Merfeilles,	50,000,000		460
	<hr/>	Merfeilles,	140
	165,000,000		<hr/>
			600

But at Havre they talk of 120.

The whole commerce of these isles they calculate at 500 liv. millions, by which I suppose they mean exports, imports, navigation, profit, &c. &c.

The trade of Nantes is not at present so great as it was before the American war; thirty ships have been building here at once, but never half that number now; the decline they think has been much owing to the Marishal de Castries' regulations, admitting the North Americans into the Sugar Islands, by which means the navigation of much sugar was lost to France, and foreign fabrics introduced by the same channel. The 40 liv. a ton given by government to all ships that carry slaves from Africa to the Sugar Islands, and return home with sugars, and which I urged as a great favour and attention in government, they contended was just the contrary to a favour; it is not near equal to what was at the same time taken away; that of favouring all cargoes of sugar in ships under that description, with paying only half the duties, $2\frac{1}{2}$ instead of 5 per cent. and which equalled 60 liv. per ton instead of 40.

A ship of 300 tons in the sugar trade thirty hands, but not more than sixteen or eighteen good ones, because of the law which forces a certain proportion of new hands every voyage.

West-India estates in general render to their owners at Nantes 10 per cent. on the capital so invested.

They assert, that if the East-India trade was laid open, numbers here would engage in it. There is a ship of 1250 tons now at Pambon, idle for want of employ.

A circumstance in shipbuilding deserves attention. It was remarked in conversation, that many Spanish ships last incomparably longer than any other; that this is owing to mastic being laid on under the copper bottom. Monf. Epivent, a considerable merchant here, has tried it and with the greatest success; copper bottoms all with copper bolts instead of iron ones.

Building a ship of 300 tons, 30 to 35,000 liv. ten now building.

L'ORIENT.

L'ORIENT. Every thing I saw in this port spoke the declension of the India commerce, the magazines and warehouses of the company are immense, and form a spectacle of which I had seen nothing of the kind equal, but the trade is evidently dead, yet they talk of the company possessing ten ships from 600 to 900 tons, and they even say, that five have gone this year to India and China. In 1774, 5, 6, it was great, amounting to 60 millions a year. What activity there is at this port at present, is owing to its royal dock for building some men of war. It is the port at which the farmers general import their American tobacco, the contract of which was for 25,000 hogsheads, but dwindled to 17,000.

MARSEILLES. I found here as at the other great ports of France, that the commerce with North America is nothing, not to a greater amount than a million of livres a year. The great trade is that of the Levant.

I was informed here, that the great plantation of Mons. Galifet, in St. Domingo, has 1800 negroes on it, and that each negroe in general in the island produces gross 660 liv. feeding himself besides.

Wages of seamen 33 to 40 liv. a month; in the Mediterranean 33, America 40 liv. A ship of 200 tons building here costs for timber only 25,000 liv. of 300 tons 40,000 liv. of 400 tons 75,000 liv. the wood is from 50 to 70*s*. per cubical foot; fitting out afterwards for sea, costs nearly the same.

West India Trade.

The following is the state of the trade in 1775, as given by Mons. l'Abbé Raynal.

Products exported to France of St. Domingo, Martinique, Guadaloupe, and Cayenne.

	lb.	Value. liv.	Re-exported from France. lb.	Value of re- export. liv.
Sugar,	166,353,834	61,849,381	104,099,866	38,703,720
Coffee,	61,991,699	29,421,099	50,058,246	23,757,464
Indigo,	2,067,498	17,573,733	1,130,638	9,610,423
Cacao,	1,562,027	1,093,419	794,275	555,992
Rocon,	352,216	220,369	153,178	95,838
Cotton,	3,407,157	11,017,892	102,011	255,027
Hides,	16,123	180,078	568	5,112
Carret,	8,912	89,120	100	1,000
Canefice,	206,916	55,752	120,759	32,604
Wood,	9,441,900	922,222	4,180,820	408,355
Sundries,		1,352,148		
Silver,		2,600,000		
		126,378,155		73,425,538
Sterling,				

Ships that carried on the Trade the same Year.

	Ships.		Ships.
Dunkerque,	13	La Rochelle,	24
Le Havre,	96	Bordeaux,	220
Honfleur,	4	Bayonne,	9
St. Malo,	13	Marseille,	71
Nantes,	112		<hr/>
			562

In 1786, the imports from these colonies into France were,

St. Domingo,	-	131,481,000liv.
Martinique,	-	23,958,000
Guadeloupe,	-	14,360,000
Cayenne,	-	919,000
Tobago,	-	4,113,000
St. Lucie, nothing directly.	-	

* 174,831,000

Of these,—Sugar, 174,222,000lb.—Coffee, 66,231,000lb.—Cotton, 7,595,000lb.

The navigation in 569 ships, of 162,311 tons, of which Bordeaux† employs 246 ships, of 75,285 tons.

In 1786 the import of raw sugar was greater than in 1784, by	lb.
Of white sugar, by	8,475,000
Of cotton, by	17,155,000
	2,740,000

Cotton has been increasing in demand by foreigners, who took in 1785, more by 1,495,000lb. than in 1784; and in 1786 more by 1,798,000lb. than in 1785.

In 1784, France sent to Africa seventy-two ships of 15,198 tons. In 1785, the number 102 ships of 36,429 tons, and in 1786, she employed 151

* Total in 1784 was 139,000,000liv. What can Monf. Begoueu, of Havre, mean by raising this to 230,000,000?—800 ships?—1200 ships?—25,000 seamen? and I do not know what other extravagances? *Precis sur l'Importance des Colonies.* 8vo. 1790. p. 3, 5, &c. Another writer states, 800 large ships, 500 small ones, and value 240 millions! *Opinion de Monf. Blin*, p. 7. How these calculations are made, I do not conceive.

† Bordeaux I take to be a place of greater and richer trade than any provincial town in the British dominions. Our greatest are,

	Tons.	Seamen.		Tons.	Seamen.		Tons.	Seamen.
Newcastle, which in 1787 possessed of shipping,	105,000	5,399	Whitehaven,	53,000	4,000	Bristol,	33,000	4,070
Liverpool,	172,000	10,000	Sunderland,	53,000	3,300	Yarmouth,	32,000	
			Whitby,	46,000	4,200	Lynn,	16,000	
			Hull,	46,000	-	Dublin,	14,000	

ships.

ships of 65,521 tons, the cargoes worth 22,748,000 liv. of which navigation Nantes possessed forty-two ships; the cargoes consisted of

	liv.		liv.
Arms, - - -	617,000	Iron, - - -	446,000
Pitch and tar, - -	82,000	Oil of olives, - -	41,000
Cafes, - - -	78,000	Legumes, - - -	415,000
Salt meat, &c. - -	677,000	Liqueurs, - - -	100,000
Cowrie-shells, - -	1,251,000	Handkerchiefs, - -	735,000
Coral, - - -	265,000	Piaftres, - - -	514,000
Cordage and sails, -	357,000	Beads, &c. - - -	123,000
Cutlery, - - -	132,000	Rice, - - -	257,000
Copper, - - -	431,000	French linens, - -	2,205,000
Woollen cloths, - -	393,000	Foreign, ditto. - -	8,865,000
Brandies, - - -	1,289,000	Bordeaux wines, - -	655,000
Stuffs of all sorts, -	566,000	Other wines, - - -	114,000
Flour, - - -	186,000		

The returns to France in six ships of 1180 tons, brought 355,000lb. of gum Senega, 37,000lb. of elephant's teeth, both worth 1,173,000 liv.

But the slave trade on French bottoms did not increase with the increase of the African trade in general.

In 1784, slaves sold in the isles, - - -	25,116
1785, ditto, - - -	17,147
1786, ditto, - - -	26,000

But as the produce increased, there seems reason to think, that foreigners partook of this trade.

These in French bottoms, the total numbers must be much more considerable, as appears from the following table of St. Domingo only.

Years.	No. Negroes sold.	Price.	Years.	Coffee sold.	Price.
		liv.		lb.	lb.
1783	9,370	15,650,000	1783	44,573,000	33,429,750
1784	25,025	43,602,000	1784	52,885,000	44,951,250
1785	21,762	43,634,000	1785	57,368,000	57,368,000
1786	27,648	54,420,000	1786	52,180,000	57,398,000
1787	30,839	60,563,000	1787	70,003,000	91,003,900
1788	29,506	61,936,000	1788	68,151,000	92,003,850*

It deserves observation, that while the quantity almost trebled in five years, the price rose continually.

Price per lb. in 1783, - 15s.	Price per lb. in 1786, - 22s.
1784, - 17s.	1787, - 26s.
1785, - 20s.	1788, - 27s.

* *Mémoire Envoyé le 18 Juin 1790, au Comité des Rapports, par M. de la Luzerne, Ministre & Sec. d'Etat.* 4to. p. 70.

Exports from France to these isles in 1786.

To St. Domingo,	44,722,000 liv.
Martinique,	12,109,000
Guadaloupe,	6,274,000
Cayenne,*	578,000
Tobago,	658,000
St. Lucie, nothing directly,	
	<hr/> 64,341,000

Consisting of	liv.
Salted beef,	1,264,000
Stockings and caps,	722,000
Hats, &c.	1,676,000
Cordage and sails,	2,667,000
Silk lace,	791,000
Woollen cloths,	602,000
Stuffs of all sorts,	1,442,000
Brandy,	467,000
Flour,	6,515,000
Iron,	1,410,000
Cheese,	740,000
Oil of olives,	1,314,000
Linen,	697,000
Handkerchiefs,	1,696,000

Consisting of	liv.
Muslins, French, foreign, and Indian,	789,000
Mercery and clinqualetic	1,028,000
Furniture,	374,000
Sundries,	804,000
Shoes,	1,248,000
Soap,	1,402,000
Tallow and candles,	1,420,000
French linens,	13,360,000
Foreign linens,	985,000
Bordeaux wines,	5,490,000
Other wines and liquors,	1,080,000
	<hr/> 64,342,000

Of which Bordeaux exports to the amount of 33,761,000 liv. Foreign articles exported pursuant to the arret of August 30th, were 4,967,000 liv.

Imports from the isles, 174,831,000 liv.—Exports to them, 64,341,000 liv.

Balance against France, 210,490,000,

The exports in 1786 to the Isles were less than those of 1785 by 11,761,000 liv.

But the exports to Senegal were greater by 12,514,000 liv.

The decrease was in manufactures;

Linens in 1784, 17,796,000 liv.—1786, 13,363,000 liv.

August 30, 1784, in the ministry of the Maréchal de Castries, foreigners were permitted, under certain regulations, to trade to the French sugar islands, after a spirited controversy in print for and against the measure. The trade of 1786, in consequence of this arret, was as follows:

<i>Imports in the Isles.</i>		<i>Exports from Ditto.</i>	
	liv.		liv.
From the United States,	13,065,000	To the Americans,	7,263,000
English,	4,550,000	English,	1,259,000
Spaniards,	2,201,000	Spaniards,	3,189,000
Dutch,	801,000	Dutch,	2,030,000
Portuguese,	152,000	Swedes and Danes,	391,000
Danes,	68,000		
Swedes,	41,000		
	<hr/> 20,880,000		<hr/> 14,133,000

Navigation

* In 1777, it was 600,000 liv.

Navigation of this Trade.

<i>Imports.</i>			<i>Exports.</i>		
	<i>Ships.</i>	<i>Tons.</i>		<i>Ships.</i>	<i>Tons.</i>
American vessels,	1,392	105,095	American,	1,127	85,403
French,	313	9,122	French,	534	13,941
English,	189	10,192	English,	153	10,778
Spanish,	245	6,471	Spanish,	249	5,856
Dutch, Portuguese,			Dutch, &c.	32	1,821
Swedes & Danes,	34	2,229			
	<hr/>	<hr/>		<hr/>	<hr/>
	2,102	133,109		2,095	117,799

As the cultivation and exports from the isles in 1786, were greater than in 1784, the demand for French manufactures ought to have been greater also; but this was not the case;

Export of French linens to the isles in 1784, 17,796,000 liv.

1786, 13,363,000

Aulns of French linen — 1784, 7,700,000

1785, 5,200,000

1786, 6,100,000

It would have been found so, if the arret of August 30 had not opened the colonies to foreigners, who introduced manufactures as well as lumber and provisions. It is a great question, whether this was right policy; the argument evidently turns on one great hinge; the peculiar benefit to the mother country, from possessing colonies, is their *supply*; to sell them whatever they demand, and to secure the navigation dependent. It is not, to be sure, of sugar and coffee that nations plant colonies; they are sure of those, and of any other commodities if they be rich enough to pay for them; a Russian or Pole, is as certain of commanding sugar as a Frenchman, or an Englishman; and the governments of those countries may raise as great a revenue on the import, as the governments that possess the islands. The *peculiar* benefit, therefore, of colonies, is the *monopoly of their supply*. It is in vain to say, that permitting the colonists to buy what they want at the cheapest and the best hand, will enable them to raise so much more sugar, and tend ultimately to the benefit of the mother country; since, let them grow as rich as possible, and increase their culture to any degree whatever, still the advantage of the mother country arises from the supply; and if she loses that to gain more sugar, she loses all for which the possession is desirable. It would be right for every country to open her colonies to all the world on principles of liberality and freedom; and still it would be better to go one step farther, and have no colonies at all. The sugar islands of all nations, in the West-Indies, including the great island of Cuba, are considerable enough

to

to form an independent free nation ; and it wants not many arguments to shew, that the existence of such an one would be far more beneficial to the English, French, and Spaniards, than the possession of those islands as colonies. To return, however, to the arret of August 30, there is reason to believe, that the policy which induced the Maréchal de Castries to alter the existing laws relating to foreigners was questionable, and attended with evils, in proportion to the extent of the trade that took place in consequence.

The result of the French sugar trade, resembles nearly that which England carries on with her sugar colonies, namely, an immense balance against her.— We have writers who tell us, that this trade ought to be judged by a method the reverse of every other, the merit of it depending not on the exports, but on the imports : I have met with the same idea in France ; and as it is an object of very great consequence in the national œconomy, it may be worth remarking,—1, that the advantages resulting from commerce, are the encouragement of the national industry, whether in agriculture or manufactures ; and it is unquestionably the exports which give this encouragement, and not the imports of a trade, unless they are the raw materials of future labour. 2, The real wealth of all trade consists in the consumption of the commodities that are the object of such trade ; and if a nation be rich enough to consume great quantities of sugar and coffee, she has undoubtedly the power of giving activity to a certain quantum of her own industry, in consequence of the commerce which such consumption occasions, whether the sugar be the product of her own colonies, or those of any other power. 3, The taxes levied on West-Indian commodities are no motive whatever for esteeming the possession of such colonies beneficial, since it is the *consumption* that pays the tax, and not the *possession* of the land that produces the commodity. 4, The monopoly of navigation is valuable no farther than as it implies the manufacture of ship-building and fitting out ; the possession of many sailors, as instruments of future wars, ought to be esteemed in the same light as great Russian or Prussian armies ; that is to say, as the means of ambition ; and as the instruments of wide-extended misery *. 5, The possession of sugar islands is the investment of immense capitals in the agriculture of America, instead of the agriculture of France : the people of that kingdom starve periodically for want of bread, because the capitals which should raise wheat in France are employed on sugar in St. Domingo. What-

* Prejudices of the deepest root are to be eradicated in England before men will be brought to admit this obvious truth. Those prejudices took their rise from a dastardly fear of being conquered by France, which government has taken every art to propagate ever since the revolution, the better to promote its own plans of expence, profusion, and public debts. Portugal, Sardinia, the little Italian and German States, Sweden, and Denmark, &c. have been able, deficient as they are in government and in people, to defend themselves ; but the British isles, with fifteen millions of people, are to be conquered !!

ever advantage the advocates for colonies may be supposed to see in such possessions, they are bound to shew, that the investment of equal capitals in the agriculture of France would not be productive of equal and even of infinitely superior benefits. 6, It is shewn, in another place, that the agriculture of France is, in the capital employed, 450,000,000*l.* inferior to that of England; can any madness, therefore, be greater than the investment of capitals in American agriculture for the sake of a trade, the balance of which is above 100,000,000 *liv.* against the mother country, while nothing but poverty is found in the fields that *ought* to feed Frenchmen? 7, If it be said, that the re-exportation of West-Indian commodities is immense, and greater even than the balance, I reply, in the first place, that Monsr. Necker gives us reason to believe, that this re-exportation is greatly exaggerated; but granting it to rise to any amount, France bought those commodities before she sold them, and bought them with hard cash to the sum of the balance against her; first losing by her transactions with America the sums she afterwards gains by exporting to the north. The benefit of such a trade is nothing more than the *profit* on the exchange and transport. But in the employment of capital, the loss is great. In all common trades, such as those she carries on with the Levant, or with Spain, she has the common profit of the commerce, without investing any capitals in producing the commodities she buys; but in the West-Indian commerce she invests double capitals, to produce the goods she sells, and equally to produce the goods she buys. 8, If it should be said that St. Domingo is not to be considered as a foreign country, with which France trades, nor a colony, but as a part of itself; and that the balance between them is like the balance between them and the provinces, then I reply, that it is so ill situated a province, that to encourage a deviation of capitals from all other provinces to be invested in this, is little short of madness; *first*, from distance and cultivation by slaves, it is insecure. If it escapes the attacks of European foes, the natural progress of events will throw it into the hands of the United States. *Secondly*, it demands a great navy to defend it; and consequently taxes on all the other provinces, to the amount of two millions sterling per annum. Of what expence to Languedoc, is the possession of Bretagne? Its proportion of the common defence. Is this so with St. Domingo? France pays a marine of two millions, but St. Domingo does not pay one shilling to defend France, or even to defend itself. In common sense, the possession of such a province ought to be deemed a principle of poverty and weakness, rather than of riches and of strength. 9, I have conversed on this subject at Havre, Nantes, Bourdeaux, and Marseilles; and I have not yet met with a man able to give me one other solid reason for such a system than the fact that agriculture in the West-Indies is profitable, and not so in France. The same argument is used, and with equal truth, in England. I admit the fact; and it recurs at once to the pernicious doctrine of laying such

taxes, restrictions, prohibitions, and monopolies on land at home, that men inclined to pursue agriculture as a trade must go with their capitals into another hemisphere, in order to reap an adequate profit. But change this wretched and abominable policy; remove every tax even to the shadow of one on land; throw all on consumption; proclaim a FREE CORN TRADE; give every man a power of inclosure.—In other words give in the Bourbonnois what you have given in Domingo, and then see if French corn and wool will not return greater profits than American sugar and coffee. The possession of sugar islands, so rich and prosperous as those of France and England, dazzles the understandings of mankind, who are apt to look only on one side, where they see navigation, re-export, commercial profit, and a great circulation: they do not reverse the medal, and see, in the mischievous deviation of capitals from home, agriculture languishing, canals standing still, and roads impassable. They do not balance the culture of Martinique by the *landes* of Bourdeaux; the tillage of St. Domingo by the deserts of Bretagne; or the wealth of Guadaloupe by the misery of Sologne. If you purchase the riches that flow from America by the poverty and wretchedness of whole provinces, are you blind enough to think the account a beneficial one? I have used no arguments against the French sugar islands that are not applicable likewise to the English: I hold them to be equal obstacles to the prosperity of both kingdoms; and, as far as experiment of the loss of North America goes, I am justified by that vast and important fact—that a country may lose the monopoly of a distant empire, and rise from the imaginary loss more rich, more powerful, and more prosperous!

If these principles be just, and that they are so is confirmed by an immense range of facts, which are we to think of a politician who declares, that the loss of Bengal, or the Dutch withdrawing their money from our funds, would ruin England*?

Export of the Products of French Agriculture to the West-Indies, in 1787.

	liv.
Wine, brandy, &c.	6,332,000.
Edibles,	769,000.
Salted meats,	971,000.
Flour,	6,944,000.
Legumes,	300,000.
Candles,	500,000.
Woods, cordage, &c.	2,869,000.
Raw materials of manufactures,	4,000,000.
Furniture, cloaths, &c. the raw materials of,	2,000,000.
Raw materials of the exports to Africa,	2,000,000.
Exports of the soil,	26,685,000.

* *Consid. sur les Richesses et le Luxe.* 8vo. 1787. p. 492. In the same spirit is the opinion, that England, before the last war, had attained the maximum of her prosperity, p. 483.

Manufactures.

			liv.	
Manufactured goods of national workmanship,	20,549,000			
Materials, as above,	—	—	4,000,000	
				16,549,000
Furniture, cloaths, &c.	—	—	10,136,000	
Materials, as above,	—	—	2,000,000	
				8,136,000
Exports to Africa,	—	—	17,000,000	
Materials, as above,	—	—	2,000,000	
				15,000,000
Sundry articles,	—	—	—	7,341,000
				73,711,000

Of which 49,947,000liv. were French products and manufactures.

Fisheries.

No trade is so beneficial as that of fishing; none in which a given capital makes such large returns; nor any so favourable to those ideal advantages, which are supposed to flow from a great navigation. The French were always very assiduous in pushing the progress of their fisheries. Supposing them right in the principles of those efforts they have made to become powerful at sea, which, however, is exceedingly questionable, they have certainly acted wisely in endeavouring to extend these nurseries of maritime power.

			Ships.		Tons.
Newfoundland and Island fisheries,	1784,	—	328	—	36,342
	1785,	—	450	—	48,631
	1786,	—	453	—	51,143
Returnss of cod, mackarel, and herring, in	1784,	—	15,414,000 lb.		
	1785,	—	18,154,000		
	1786,	—	19,100,000		

Quantity of Newfoundland dried cod,	1784,	—	230,516 quintaux.
	1785,	—	241,850
	1786,	—	272,398

Cod exported to Italy and Spain,	1784,	—	1,835,000 lb.
	1785,	—	2,410,000
	1786,	—	4,117,000

This great increase attributed to the arret of Sept. 1785, which granted bounties on the export of cod of 5 liv. and of 10 liv. per quintal.

Most of the national fisheries are flourishing; they employed in 1786,

	Ships.	Tons.		Ships.	Tons.
Herrings, &c.	928	—	Irish from Dunkerque,	62	3,742
Newfoundland,	391	47,399	Whale,	4	970

Dieppe does most in the fishing trade, possessing 556 ships, of 21,531 tons.

The value of the merchandize embarked in 1786, on board the fishing vessels, 3,734,000 liv. and the returns the same year were,

Herrings and mackarel, &c.	—	5,589,000 liv.
Cod,	—	13,686,000
Whales,	—	53,000
Sundries,	—	200,000
		<hr/>
		19,528,000

Trade with the United States.

The commerce with France carries on with the North Americans, is all the reward she reaps from having expended probably 50 millions sterling to secure their freedom. Visions of the depression of the British power, played indeed in the imaginations of the cabinet of Versailles; but peace was scarcely returned, before those airy hopes entirely vanished; every hour proved, that England, by the emancipation of her colonies, was so far from losing any thing, that she had gained immensely: the detail of this trade will prove, that France was as much deceived in one expectation as in the other.

On an average of three years preceding the French revolution, the imports	liv.
from America were	9,600,000
Ditto into the French sugar islands,	11,100,000
	<hr/>
	20,700,000
Exports of France to North America,	1,800,000
Ditto from the isles,	6,400,000
	<hr/>
	8,200,000
	<hr/>
Balance,	12,500,000

“ Ces républicains,” says Monf. Arnould*, “ se procurent maintenant sur nous, une balance en argent de 7 à 8 millions, avec laquelle ils foudroyent l’industrie Angloise. Voila donc pour la France le *nec plus ultra* d’un commerce, dont l’espoir au pû contribuer à faire sacrifier quelques centaines de millions et plusieurs générations d’hommes !”

Trade to Russia.

It is commonly supposed in England, that the trade which France carries on with Russia is very beneficial, in the amount of the balance; and there are French writers also who give the same representation; the part in French navigation will appear in the following statement:

* *De la Balance du Commerce*, 1791. tom. i. p. 234.

Imports

Imports from Russia to France in 1788,	liv. 6,871,900
From France to Russia,	6,108,500

Balance against France, 763,400

This, it is to be noted, concerns French bottoms only; the greatest part of the commerce being carried on in English and Dutch bottoms*.

The whole commerce of France with the Baltic is said to employ 6 or 700 ships of 200 tons†.

Trade to India.

At the period of the Revolution the state of the trade to India was as follows:

Imports from India on a medium of 1785, 1786, and 1787	34,700,000
In 1788,	33,300,000

Merchandize.

Indian manufactures,	liv. 26,600,000
Spices, tea and coffee of Moka,	6,000,000
Silk, cotton, ivory, woods,	1,150,000
China, &c. &c.	493,000
Drugs,	367,000
	<hr/> 34,610,000

Exports from France at same time,	17,400,000‡
Exports to the isles of France and Bourbon on an average of the same three years,	4,600,000
Imports,	2,700,000

By the regulation of May 1787, confirmed by the National Assembly, Port Louis, in the Isle of France, is made free to foreign ships, by which means it is expected that that port will become an entrepôt for the India trade.

* The navigation of the Baltic will appear from the following list of ships which passed the Sound:

	1784	1785		1784	1785
English,	3172	2535	Courlanders,	16	25
Danish,	1691	1789	Dantzickers,	190	161
Swedish,	2170	2136	Bremeners,	259	176
Prussians,	1429	1358	Hamburghers,	75	61
Dutch,	1366	1571	Lubeckers,	63	79
Imperial,	167	66	Rostockers,	53	110
Portuguese,	38	28	Oldemburghers,	8	0
Spanish,	19	15	French,	25	20
American,	13	20			
Venetian,	5	4		10,897	10,226
Russian,	138	114			

Corméré Recherches sur les Finances, tom. i. p. 385.

† Ib. p. 362.

‡ De la Balance du Commerce, tom. i. p. 282.

Navigation.

There is not much reason for modern readers to be solicitous concerning the commerce or navigation of any country; we may rest assured, that the trading spirit which has seized all nations, will make the governments anxious to promote, as much as possible, whatever interests their commerce, though their agriculture is, at the same moment, in the lowest state of poverty and neglect. All the English authorities I have met with, respecting the navigation of France, are of a very old date; persons who are curious in these speculations, will probably be pleased with the following account:

Ships in France cleared outwards in 1788.

	Ships.	Tons.
For the Levant and coast of Barbary,	366	45,285
Whale fishery,	14	3,232
Herring fishery,	330	9,804
Mackarel fishery,	437	4,754
Sardinia,	1,441	4,289
Fresh both in the ocean and Mediterranean,	2,668	11,596
Cod,	432	45,446
All parts of Europe and the American States,	2,038	128,736
West-Indies,	677	190,753
Senegal and Guinea,	105	35,227
East-Indies, China, Isles of France and Bourbon, both by company and otherways,	86	37,157
	8,588	516,279

N. B. The total navigation in Europe and America, either by French or foreign ships, amounts to 9,445 ships and 556,152 tons.

Monf. Arnould in his treatise *De la Balance du Commerce*, has given an account of the French navigation for the year 1787, which does not well accord with this, I insert an extract from it here that the reader may have the opportunity of comparing them.

Table of the Tonnage, French and foreign, employed in the Commerce of France in 1787.

	French. tons.	Foreign. tons.
Europe, the Levant, coast of Barbary, and United States,	161,582	532,687
India and China,	6,667	—
Coast of Guinea, slave trade, Isles of France and Bourbon,	45,124	—
Sugar Islands,	164,081	—
		Whale.

COMMERCE.

519

			French. tons.	Foreign. tons.
Whale fishery,	—	—	3,720	—
Cod fishery,	—	—	53,800	—
Herring ditto,	—	—	8,602	—
Mackarel ditto,	—	—	5,166	—
Anchovie ditto,	—	—	3,062	—
Sundry fisheries,	—	—	12,320	—
Coasting trade,	—	—	1,004,729	6,123
			<hr/>	<hr/>
			1,459,998	538,810
			<hr/>	<hr/>
Total,	—	—	2,007,661	

The immense increase of the navigation of England, appears by comparing this account with that first of commercial writers, Lord Sheffield, for the average of three years preceding 1773.

			Ships.	Tons.	Men.
Foreign trade,	—	—	2719	335,583	30,771
Coasting trade,	—	—	3458	219,756	15,244
Fishing vessels,	—	—	1441	25,339	6,774
			<hr/>	<hr/>	<hr/>
Totals,	—	—	7619	580,579	52,789
This is exclusive of Scotland*.					

Mons. Arnould, however, assures us, that at the period of the Revolution, France possessed 1000 ships (I do not love such round numbers, which always betray inaccuracy), of 250 tons, employed in long voyages, and in the cod and whale fisheries†. The whole maritime commerce of exportation employing at the same time 580,000 tons of all nations, of which 152,000 tons were French.

Cabotage (coasting Trade) the same Year.

			Ships.	Tons.
French ships,	—	—	22,360	997,666
Foreign ditto,	—	—	60	2,742
			<hr/>	<hr/>
			22,420	1,000,408

N. B. There is no distinction between ship and voyage; if a ship clears out five times a-year, she is registered every voyage. The article *Sardinia*, which appears so large in ships, and so small in tonnage, must, I should suppose, be for a fishery on the coasts of that island.

* *Observ. on the Commerce of the American States*, by John Lord Sheffield, 6th edit. p. 160.

† *Balance du Commerce*, tom. ii. p. 23. 8vo. 1791.

From

From the tonnage of the ships, as they are called, in the fisheries, it appears, that they are little more than boats: those in the herring fishery, are about 30 tons each—and in the mackarel, little more than 10 tons.

The navigation of England for a year, ending the 30th September, 1787, was,

	Ships.	Tonnage.	Men.
English, —	8,711	954,729	84,532
Scotch, —	1,700	133,034	13,443
East Indiamen, —	54	43,629	1,400
Ireland, —	—	60,000	—
	10,465	1,191,392	103,375

Without including the West-India trade, or that of the North American colonies, or the African or Asian, the Indiamen excepted.

Progress of the French Commerce.*

	Imports. liv.	Exports. liv.
1716 to 1720, peace, average per annum,	65,079,000	106,216,000
1721 to 1732, peace,	80,198,000	116,765,000
1733 to 1735, war,	76,600,000	124,465,000
1736 to 1739, peace,	102,035,000	143,441,000
1740 to 1748, war,	112,805,000	192,334,000
1749 to 1755, peace,	155,555,000	257,205,000
1756 to 1763, war,	133,778,000	210,899,000
1764 to 1776, peace,	165,164,000	309,245,000
1777 to 1783, war,	207,536,000	259,782,000
1784 to 1788, peace,	301,727,000	354,423,000

It will not be useless to contrast this with the trade of England:

Imports. L.	Exports. L.	Imports. L.	Exports. L.
1717, 6,346,768	9,147,700	1771, 12,821,995	17,161,146
1725, 7,094,708	11,352,480	1783, 13,122,235	15,450,778
1735, 8,160,184	13,544,144	1785, 16,279,419	16,770,228
1738, 7,438,960	12,289,495	1787, 17,804,000	16,869,000
1743, 7,802,353	14,623,653	1788, 18,027,000	17,471,000
1753, 8,625,029	14,264,614	1789, 17,821,000	19,340,000
1763, 11,665,036	16,160,181	1790, 19,130,000	20,120,000

As the *balance*, or ideas of a balance, are a good deal visionary, we shall find, by adding the two columns together, that the trade of England has suffered no de-

* Monf. Arnould, of the *Bureau de la Balance du Commerce* at Paris, asserts, I know not on what authority, that the English navigation in 1789 amounted to 2,000,000 tons.

cline, but, on the contrary, is greater than ever; it deserves attention, however, that the progress of it has not been nearly so rapid as that of France, whose commerce, in the last period, is $3\frac{1}{2}$ times as great as it was in the first; whereas ours has in the same period not much more than doubled. The French trade has almost doubled since the peace of 1763, but ours has increased not near so much. Now it is observable, that the improvements, which in their aggregate mark national prosperity, have, in this period of twenty-nine years, been abundantly more active in England than in France, which affords a pretty strong proof that those improvements, and that prosperity, depend on something else than foreign commerce; and as the force of this argument is drawn directly from facts, and not at all from theory or opinion, it ought to check that blind rage for commerce, which has done more mischief to Europe, perhaps, than all other evils taken together. We find, that trade has made an immense progress in France; and it is elsewhere shewn, that agriculture has made little or none: on the contrary, agriculture has experienced a great increase in England, though very seldom favoured by government, but commerce an inferior one; unite this with the vast superiority of the latter in national prosperity, and surely the lesson afforded by such facts needs no comment.

Of the Premiums for the Encouragement of Commerce in France.

The French administration has long been infected with that commercial spirit which is at present the disgrace of all the Cabinets of Europe. A totally false estimate that has been made of England, has been the origin of it, and the effect has been an almost universal neglect of agriculture.

The premiums paid in France for encouraging their commerce are the following, and the amount for a year ending the 1st of May 1789, is added,

Expense of transporting dry cod to the American isles, and to various foreign countries, at the rate of 5, 10, and 12 liv. per quintal, by the arret of 18th Sep. 1785, and 11th Feb. 1787,	liv.
Bounty payable on the departure of ships for the coast of Guinea and for Mozambique, at the rate of 40 liv. per ton, by the arrets of 26th Oct. 1784, &c.	547,000
Bounty on the negroes transported into the Colonies at the rate of 60 to 100 liv. a-head, by the arret of 26th Oct. 1781, and of 160 liv. and 200 liv. by that of the 10th Sep. 1786,	1,950,000
Bounty for encouraging the navigation in the North Sea, at the rate of 3, 4, 6, and 10 liv. per ton, by the arret of 25th Sept.	865,000
Bounty on the export of refined sugar 4 liv. the quintal, by the arret of 26th May, 1786,	4,000
Encouragements given to seventeen manufactures, 39,000 }	108,000
To others, 61,000 }	100,000
3 X	Bounty

	liv.
Bounty of 4 liv. per 1000lb. of cast iron, granted to the foundries of Mont Cenis in Bourgogne, — — — —	18,000
Bounty granted to the people of Nantuket established at Dunkerque for the whale fishery, at 50 liv. per ton of oil, — — — —	170,000
To the coal mines of the kingdom, — — — —	100,000
	<hr/> *3,862,000

I hope it does not at this time of day want much explanation, or many observations on this contemptible catalogue of the commercial merit of the old government of France. The fisheries and sugar islands, if we are to believe the French writers, are the most valuable and the most important articles of the French commerce.—How can this be, if they want these paltry bounties to assist them? St. Domingo is said in France to be the richest and most valuable colony there is in the world: I believe the fact; but if we were to consider only a premium on supplying it with slaves, we should be apt to imagine it a poor sickly settlement, scarcely able to support itself. If cultivation is vigorous there, it demands slaves without any bounty; if it is not vigorous, no bounty will make it so; but the object, real or pretended, of bounties, is to induce people to invest capitals in certain employments, which they would not so invest without such bounties. This is to profess giving bounties to the investment of capitals in American agriculture, rather than in that of France; the tendency is clear; but in this age it surely becomes a question, whether the *landes* of Bretagne and Anjou would not be as deserving of such a bounty as the forests of Hispaniola?

To remark on all these premiums is unnecessary; it is sufficient to observe, that all, except that for coal, is absurd, and that that is so given as to be useless.

Of the Treaty of Commerce between Great Britain and France.

This celebrated measure was so thoroughly debated in England, that I shall not go again over ground trodden almost bare; but, with attention chiefly to brevity, give some French authorities upon it, which are but little known in England.

There are in most of the great commercial towns in France, societies of merchants and manufacturers, known under the title of *Chambre du Commerce*; these gentlemen associate for the purpose of giving information to the ministry on any commercial question upon which their opinion is demanded, and for other purposes that concern the trading interests of their respective towns.

* *Compte Général*, 1789. p. 186.

The *Chambre du Commerce de Normandie*, on occasion of this treaty, printed and dispersed (it was not sold) a pamphlet entitled, *Observations sur le traité de Commerce entre la France & l'Angleterre*.

In this work they inform their readers, that in order to draw a fair comparison between the advantages and disadvantages of the two kingdoms in manufactures, they had deputed two merchants of Rouen, sufficiently understanding in the fabrics of Normandie, and who spoke English, to take a journey to the manufacturing parts of England, in order to acquire authentic intelligence, and upon their return they were desired to make a similar tour through the manufactures of Normandie, that they might possess themselves of the knowledge requisite for a fair comparison; and from their reports, as well as from other materials, the *Chambre du Commerce* speak in their observations:

“ But while we are embarking in this undertaking, the alarm of our commerce increases every day, and becomes a real evil by a most active sale of every article of English manufacture, which can enter into competition with our fabrics. There is not an article of habitual consumption with which England has not filled all the magazines of France, and particularly those of this province, and in the greatest number of these articles the English have a victorious preponderance. It is afflicting to see the manufacturers who suffer by this rivalry already diminishing successively the number of their workmen, and important fabrics yielding in another manner to the same scourge, by English goods being substituted in the sale for French ones; receiving a preparation agreeable to the consumption, named, marked, and sold as French, to the infinite prejudice of the national industry.

“ The Chamber is apprehensive of the immediate effect of the introduction of English cottons, whereof the perfection of the preparation, the merit of the spinning, united with their cheapness, has already procured an immense sale. A coup d'œil upon the folio 5 of the table of patterns of Manchester, and the Fauxbourg St. Sever, at Rouen, will demonstrate the disadvantages of the latter.

“ Our potteries cannot escape a notable prejudice; the low price of coals in England enables the English to undersell us in these articles 25 per cent.; considerable cargoes have already arrived at Rouen.

“ The 36,000 dozen pairs of stockings and caps of cotton, made in the generality, are the produce of 1200 looms. Within three months it is calculated, that at Rouen alone, more than one hundred have stopped. The merchants have made provision of English goods, for more than 30,000 dozen pairs of stockings and caps have already been imported.

“ Manchester is the Rouen of England, the immense fabrication of cotton stuffs, the industry of the manufacturers, their activity, the resource of their mechanical inventions, enable them to undersell us from 10 to 15 per cent. Every circumstance of the fabric proves the riches of the master manufacturers, and the solicitude of government for supporting and favouring their industry.

“ In general their stuffs and their linens are finer, of a more equal spinning, and more beautiful than ours; nevertheless they are at a lower price, which proves the importance of their machines for carding and spinning the cotton in a perfect and expeditious manner. By the aid of these united means, they flatter themselves at Manchester with equalling the muslins of India, yet the highest price of those hitherto wrought does not exceed 8s. a yard, but the fabric is so considerable, that they are not afraid to value it at 500,000 liv. a week; however one may be permitted to doubt of this, one must be amazed (*effrayé*) at the immense sale which the English have procured for this article, and the more so as we have been assured, that the magazines of the company contained, within a few months, to the value of 80,000,000 liv. in India muslins.

“ We do not know that the English have in their fabrics of linen any other inventions for simplifying the labour than the flying shuttle and the flax-mill, because the fibres of flax are not adapted to the application of machines for spinning and carding; we are, however, assured that they have found means, by water-mills, to weave many pieces of linen at the same time and in the same loom.

“ The price of coals in the preparation of cotton is of some importance. The inhabitants of Manchester pay for coal only 9s. a ton, of 2000lb. (French,) but at Rouen it is 47 to 50 liv. the ton.

“ The English are forced to render justice to the cloths of Louviers, as well as to those of Abbeville and Sedan. They cannot dissemble that they think them more soft than their own, and that the colours are more lively and more seducing, but we cannot hope to sell them in England. The English, whether through a spirit of patriotism, or by the real agreement of their kind of fabric to the nature of their climate, prefer their cloths extremely full, and of colours very *sombre*, because the smoke of their coal fires, combined with the humidity of the atmosphere, depositing a greasy dust, might easily affect our colours so lively, but of little solidity; however it may be, the competition at present of the English in France cannot be very hurtful to the manufactures of Louviers, Sedan, and Abbeville; but as the English import as well as we the wools of Spain, they may certainly attain the beauty of the cloths of Louviers.

“ The

“ The fabrics of Elbœuf, however prosperous, have not the same resources as the English ones of the same kind, excellent national wools proper for their fabric at a low price. We calculate that the ordinary cloths of five-fourths breadth, and 15 or 16 liv. price per auln, can scarcely withstand the competition of the cloths of Leeds, called Bristols, which cost only 11 liv. the auln.

“ The cloths, ratines, espagnolettes, flanelles, and blankets of Darnetal, have most of them a superiority over many similar English fabrics; but the low price of these last will render their competition fatal. We cannot too often recur to the advantages which the English possess over all the woollens of France, which are wrought like these of Darnetal, with the wools of France. The high price of our wool, and its inferiority in quality* to that of England is such, that this inequality alone ought to have induced the rejection of the treaty of commerce on the terms upon which it has passed. The manufacturers of Darnetal, Rouen, Beauvais, Amiens, Lille, and Rheims, may find it their interest to import English fabrics before they have received the last hand, which they can give cheaper than in England, and thus appropriate to themselves a profit in the cheapness and beauty of the English wools, by underselling the similar fabrics entirely French.

“ The English ratines cannot support the parallel with those of Andely, where also good cazimirs are made in imitation of the English, but quite unable to stand against them. Before the treaty the English cazimirs came contraband to France, and were therefore dear, but now all the magazines of the kingdom regorge with them, for at the same time that they are cheaper, they are in quality more perfect, of a more equal grain, and less subject to grease.

“ The manufacture of cloths at Vire has fallen from 26,000 pieces per ann. to 8000. During the war they had an export to North America, but on the peace the cloths of Leeds presented themselves with a victorious superiority, and will hold it till we have perfected the breed of our sheep, and obtained fleeces of a greater length and weight.

“ In regard to the stuffs of wool, called serges, molletons, flanelles, londrins, satins, burats, camelots, baracans, calmandes, étamines, cazimirs, sagathis, &c. which were furnished both to France and foreigners by Darnetal, Aumale, Beauvais, Amiens, Lille, Rheims, and le Mans, they must sink under the competition of the similar manufactures of England. During the late war the Spaniards gave considerable employment in these articles to the manufactures of Amiens, Lille, and Aumale. On the first report of a

* The manufacturers of France possess no such iniquitous monopoly against the farmer, as makes the disgrace and mischief of English agriculture.

peace, they not only suspended their commissions, but even gave counter orders for what were already bespoke, the English having offered the same stuffs 20 per cent. cheaper than we could afford them.

“ We may observe in fine, upon the conditions of the treaty, that the English have contrived to leave excessive duties upon all the articles, the trade of which would have offered advantages for France, and to prohibit the most interesting, to admit those whereof the reciprocity would be wholly to their own advantage ; and to favour in a manner almost exclusively, in their importations, such as are made in English bottoms ; circumstances which, united with the famous act of navigation, explain, in a great measure, the disproportion which exists between the number of English and French vessels in the commerce of the two nations since the treaty, which is at least twenty to one.

“ The opinion we develop upon this treaty is general, and founded on a simple reflection, that France furnishes twenty-four millions of consumers against eight millions which England offers in return *.

“ The situation of France cannot have been considered in the present circumstances ; at the same time that the consumption of its inhabitants, first, that natural and necessary aliment of national industry becomes a tribute to England, who has carried her fabrics to the highest degree of perfection ; the French manufacturers and workmen, discouraged without labour, and without bread, may offer an easy conquest to Spain, who, more enlightened at present upon the real means of increasing her prosperity and her glory, develops with energy the desire of augmenting her population, of extending and perfecting her agriculture, and of acquiring the industry that shall suffice for her wants, and exclude as much as shall be possible from her markets objects of foreign fabrication. We are assured that the workmen in the southern provinces pass successively into the different manufactures which are established ; an emigration, which cannot but increase by the effects of the treaty of commerce with England.”

“ The Chamber of Commerce in the same memoir declare, that the English had not augmented their consumption of French wines in consequence of the treaty. And they dwell repeatedly on the superior wealth of the English manufacturers to that of the French ones, the influence of which, in the competition of every fabric, they feel decisively.

“ The French ministry, the Archbishop of Sens at their head, to remove the impression which they feared would follow the preceding memorial of the merchants and manufacturers of Normandie, employed the celebrated *œconomiste* Monf. du Pont, editor of the *Ephemerides du Citoyen*, a periodical work, printed

* It is not a trifling error in the Chamber to state eight millions instead of fifteen, the fact.

1767—1770, and since elected for Nemours into the national assembly, to answer it, which he did in detail, and with ability: the following extracts will shew the arguments *in favour* of the treaty.

—“ Relative to the wine trade, your information has not been exact. I am certain that it has been considerably augmented. The difference between the duties in England upon the wines of Portugal and France was 34*s.* of our money the bottle; it is at present but 5*s.* 8 den. in spite of the proportional diminution made upon the wines of Portugal, an approximation of which must be very favourable to us. Authentic accounts of the custom-house at London have been sent to the department of foreign affairs, stating the quantity of French wines imported into that single city, and it rises from the month of May to that of December of the last year (1787) to 6000 tons of four barriques each. In preceding years, in the same space of time, the legal importation has amounted only to 400 tons, and the contraband import was estimated at about an equality. The augmentation, therefore, for the city of London, is at least 5000 tons, or 20,000 barriques, which, at 1200 liv. amount to 6,000,000 liv. The accounts of the balance of commerce for nine years preceding the last war mark 1500 tons as the mean export of our wines to England, Scotland, and Ireland. In 1784, that export did not exceed 2400 tons. The city of London has therefore imported in the eight last months of 1787 four times more than the three kingdoms formerly imported in the course of a whole year.

“ The sale of vinegars, brandy, oil, soap, dried fruits, preserves, cambric, linens, and millinery, has much augmented. In particular, cambric and linens have doubled.

“ But this is no reason why the ministry should not, on one hand, exert themselves with all activity to oblige the English to adhere to the terms of the treaty (which they have deranged by their tariffs and regulations of their customs); and, on the other, to favour the national industry, particularly that of the provinces of Picardy, Normandie, and Champagne, for whom, since the treaty, the competition of the English has certainly been very mischievous (*très fâcheuse*).

“ There are five branches of industry in which the English have over us at present, in some respects an advantage more or less solid; in cotton stuffs, in small woollens, in pottery, in steel, and in leather.

“ In regard to cotton, Monsr. Barneville is in possession of a machine, invented by his uncle, which spins thread of a degree of fineness till now unknown; even to 300,000 aulns of thread from a pound of cotton. The finest muslins of Asia are made with threads of 140,000 aulns to the pound. The government, after three years consideration, has at last determined on the report of
M. Def-

M. Desmarest to purchase this machine, and to distribute many of them among our manufactures.

“ It is inconceivable that we have not a superiority over the English in cottons. We have the raw material, and even sell to our rivals the greater part of what they use. We have provisions and labour cheaper than they have *. It is only machines which we want, or rather we do not want them, for we have them in great numbers; we have artists capable of perfecting them; we have already the foreign models; we can give prizes, and we have academies to judge †.

“ As to the woollen fabrics, we have nothing to fear of competition in fine cloths, ratines, espagnolettes, molletons, and caps made of Spanish wool; or in which it enters for the greater part. Our fabrication of this sort is superior to that of the English; our stuffs are softer and more durable, and our dyeing more beautiful. We can imitate at will, all the sombre colours of the English fabrics, but they cannot copy any of our lively colours, and especially our scarlet.

“ In the middling class of wollens, which comprizes the tricots and small stuffs, we have a marked inferiority. The wools of which these are made are with us less fine, less brilliant, and higher priced. But this evil is not without a remedy.

“ Of the next manufacture it may be observed, that the English potteries have been imported at all times into Loraine, without paying any duties, and yet that province is full of manufactures of pottery which prosper.”

Relative to the steel manufacture, Mons. du Pont cites the following case: “ Mons. Doffer, after having been a long time at Clignancourt occupied for our English magazines to make bijoux of steel, which have been sold for English, has been taken under the protection of government, who have furnished him with the means of carrying on business. At present established in the inclosure of the Quinze Vingts, he there fabricates, with at least as great perfection as in England, and at a lower price by 30 per cent. ‡ all the beautiful works in steel, watch chains, swords &c. &c. &c.”

Mons.

* Not so; a man is fed cheaper in France, *living badly*, but provisions are not cheaper, and labour is *really* dearer, though nominally cheaper.

† I must smile at academies being named among the manufacturing advantages of France: I wonder what academies have done for the manufactures of England.

‡ The extravagance of this ridiculous assertion, carries in itself its own reply: if this cheapness arises from government premiums or assistance, it is a farce, and absolutely beyond any fair conclusion: if it is not from such assistance, I demand how it happens that this manufacturer has been established by government? A man who is not able to establish his own fabric, able to under-work, and at Paris too! the English steel fabrics 30 per cent. !! if so, then the Chamber of Commerce in
Normandie

Monf. du Pont then infifts at length on the great import of Englifh manufactures, which took place clandestinely, not only from England directly, but by Flanders, Holland, Germany, and Liege, which it was found impoſſible to prevent, and contends, that converting ſuch import to a legal one, to the profits of the ſtate, was an object of no flight importance.

“ It is ſome years ſince the manufacturers of Sedan, and after its example thoſe of Louviers, Abbeville, and of Elbœuf, have raiſed the prices of their cloths 25 per cent. and not without ſome reaſon, imagining, under the influence of a ſpirit of monopoly, to benefit the undertakers of thoſe fabrics. But to whatever reaſon it might be aſſigned, certain it is, that German cloths, which never came into the kingdom before, have, ſince this riſe of price, found a conſiderable ſale in France, to the prejudice of the national manufactures; the treaty of commerce having been made at the time of the evil being felt, the whole effect has been laid, without much reaſon, to the operations of that treaty.”

Mr. Du Pont in like manner examines the ſtate of the ſilk manufacture, which he ſhews to be at Lyons in the loweſt ſtate of miſery and diſtreſs, owing to the war in the north of Europe abſorbing thoſe expences which in peace were otherwiſe employed; to the ſucceſſful exertions in Spain for increaſing the fabrics of that country; and to the failure of the crop of ſilk; yet while the declenſion of that manufacture had thus no ſhadow of connection with the treaty of commerce, yet happening at the ſame time, the evil, like all the others, has been attributed to its influence.

“ At all events, the treaty of commerce, ſuch as it is, is perhaps the only guarantee of peace between the two empires. I have the ſtrongest reaſon to believe, that its perſpective has haſtened the concluſion a year or two, and we have thus ſpared 400,000,000 liv. of expence; the impoſts which would have been neceſſary to pay the intereſt, the loſs of blood, and the frightful chances which every war entrains in its ſuite. It is more than probable, that without it, we ſhould for ſix months paſt have been engaging in hoſtilities, the term of which would have been impoſſible to foreſee. When France and England remain neuter and united, no war can be durable in Europe; for though other powers have cannons, ſoldiers, and bayonets, yet none of them have reſources to ſupport a war of any length; not even thoſe who reckon upon a treaſure, which would

Normandie are truly weak in their arguments in favour of great capitals in the hands of maſter manufacturers, and the fact on the contrary muſt be admitted, that no capital at all will affect the buſineſs juſt as well. What ſatisfaction is here given, to prove that the whole of this buſineſs was not, as in many other caſes, a piece of charletainerie in government? To pleaſe and delude the people by a cheapneſs gained by government paying the piper? Has the buſineſs taken root? Has it become a national object? or is it a Paris toy?

be dissipated in two campaigns at most. The only solid treasure is a good agriculture and an industrious people. The repose of the world, and above all our own, holds therefore almost solely by this treaty; which citizens, zealous without doubt, but certainly too little enlightened, would wish to see annihilated.

The argument which has been drawn from the population of the two kingdoms, founded on France containing twenty-four millions, and England eight millions, is not just. France contains nearly twenty-eight millions, and the three British kingdoms eleven; but the whole reasoning is a sophism, founded upon ignorance of the riches of the two nations. It is not on population that we are to calculate the means of buying and selling, of paying and being paid. Unhappily the greatest difference found between the two empires is not in their manufactures; that of their agriculture and crops is much more considerable. The annual crops of England have been calculated with care at 2,235,000,000 liv. (97,781,250l.) adding those of Scotland and Ireland, they cannot amount to less than 3,000,000,000 liv. (131,250,000l.) Those of France, calculated with great sagacity, after certain cases in some points, and on conjectures combined from all sorts of views in others, have been valued at the lowest at 3,200,000,000 liv. and at the highest at 4,000,000,000 liv. (175,000,000l.). We have therefore, at the most, but a fourth more crop than England; but we have to subsist a population two and an half times greater. Before we trade abroad we must live. Retrench from three milliards the easy subsistence of eleven millions of people; retrench from 4 milliards the subsistence, a little more difficult, of 28 millions of people, and you will soon see that it is not the nation of twenty-eight millions that furnishes the best market for foreign commerce, and consequently for luxury, which can only be paid for with a superfluity.

The experience of all times has proved, that nations successively rival each other in manufactures. Spain debauches and carries off our workmen in silk; but she cannot take from us our cultivators, the nature of our soil, our happy exposition, nor the privileged products which we possess exclusively. It is therefore upon the products of cultivation that must be founded, in the most solid manner, the prosperity and commerce of a great empire.

And even as to fabrics, you see by the example of the past, that excluding competition has left ours in an inferiority of which you complain. It cannot be necessary to prove to you, that the best method of raising the industry of a nation to a par with its neighbours, is by establishing such a communication as shall place unceasingly models and objects of emulation under the eyes of such as are inferior.

It is clear that by reserving to the manufacturers of a nation the exclusive privilege of supplying it, we destroy among them a great part of the principle of

of that activity which ought to perfect their industry. Believing themselves sure of purchasers, and sure also of fixing their own price, they neglect, with all proprietors of exclusive privileges, to seek the means of fabrication the most economical, and those which would render their labour the most perfect.

Monf. du Pont enters into a detail of the course of exchange through fifty-seven pages, from which he deduces the fact, that the balance upon the trade, in consequence of the treaty, was in favour of France: from May 1787 to March 1788, he gives a table of exchanges, divided into three epochs; 1. From the 1st of January 1785, to the recoinage at the French mint in October; 2. From the recoinage to the treaty of commerce, from 1st November 1785 to last of April 1787; 3. From the treaty to the time of his writing, *i. e.* from 1st May 1787 to last of March 1788.

First Epoch.

Par of exchange counted on silver $28\frac{164537}{178201}$, counted on gold 30.

January, -	$29\frac{1}{155}$	May, -	$28\frac{3}{4}$	August, -	$28\frac{32}{64}$
February, -	$28\frac{13}{16}$	June, -	$28\frac{23}{36}$	September, -	$29\frac{1}{96}$
March, -	$28\frac{25}{32}$	July, -	$28\frac{33}{48}$	October, -	$29\frac{3}{12}$
April, -	$28\frac{25}{32}$				

From January to September 1784, exchange was at 30 and 31, and fell to 29, at which rate it was about 3 per cent. against France; but it fell in June to $28\frac{23}{36}$, which was a loss of 4 per cent.; and in August the loss was at the height, or $4\frac{1}{12}$ per cent. which sunk in October to $2\frac{1}{12}$ per cent.

Second Epoch.

Par of exchange by the alteration in the French money counted on gold $28\frac{1505651}{3336896}$, and on silver $28\frac{164537}{178201}$.

Nov. -	$29\frac{3}{16}$	May, -	$29\frac{17}{48}$	Nov. -	$29\frac{17}{128}$
Dec. -	$29\frac{5}{16}$	June, -	$29\frac{5}{24}$	Dec. -	$29\frac{3}{32}$
Jan. -	$29\frac{35}{96}$	July, -	$29\frac{1}{18}$	1787 Jan. -	$29\frac{5}{16}$
Feb. -	$29\frac{7}{12}$	Aug. -	$29\frac{13}{36}$	Feb. -	$29\frac{1}{2}$
March, -	$29\frac{23}{32}$	Sept. -	$29\frac{9}{32}$	March, -	$29\frac{13}{48}$
April, -	$29\frac{7}{12}$	Oct. -	$29\frac{3}{18}$	April, -	$29\frac{14}{17}$

Upon this epoch, Monf. du Pont has a long observation concerning a supposed transport of old louis d'or from England to the French mint, which the chamber of commerce, in their reply, justly rejects.

Third Epoch.

Par as before.

1787	May	-	$30\frac{1}{6}$	Sept.	-	$29\frac{1}{2}$	1788	Jan.	-	$29\frac{1}{2}$
	June	-	$29\frac{1}{2}$	Oct.	-	$29\frac{5}{6}$		Feb.	-	$29\frac{1}{3}$
	July	-	$29\frac{1}{2}$	Nov.	-	$29\frac{5}{6}$		March	-	$29\frac{2}{3}$
	Aug.	-	$29\frac{1}{2}$	Dec.	-	$29\frac{7}{10}$				

During these eleven months, the mean rate has been $29\frac{4}{7}\frac{2}{9}\frac{9}{10}$, or about $2\frac{1}{7}$ per cent. in favour of France.

By the accounts of the *Bureau General de la Balance du Commerce*, the imports of English goods in France for the eight last months of 1787, amounted to 35,294,000 liv. and the export of French goods to England during the same time to 26,276,000 liv. a difference which Mons. du Pont attempts to convert into the favour of France, upon grounds not at all satisfactory.

The Chamber of Commerce, in their reply, assert, respecting the navigation employed, that from May to December 1787, there entered the ports of France 1030. English ships of 68,686 tons, whereas, in the same trade, there were only 170 French ships of 5570 tons.

In the same reply, the Chamber reject the reasonings of M. du Pont upon the course of exchange, and insist that it was affected by collateral changes, and by transactions not commercial.

I shall lay before the reader the result of the treaty, both according to the English custom-house, and also by the registers of the *Bureau de la Balance du Commerce* at Paris; which, I should however remark, is beyond all comparison more accurate in its estimations; and whenever it is a question between the authority of the two in opposition to each other, I should not hesitate a moment in preferring the French authority; indeed it is certain, that in many articles the valuation attached to some denominations is as old as the reign of Charles II. though the real value is known to have quintupled.

*English Account.**Export of British Manufactures to France.*

	£.	s.	d.		£.	s.	d.
1769,	83,213	18	4	1784,	93,763	7	1
1770,	93,231	7	5	1785,	244,807	19	5
1771,	85,951	2	6	1786,	343,707	11	10
1772,	79,534	13	7	1787,	713,446	14	11
1773,	95,370	13	8	1788,	884,100	7	1
1774,	85,685	13	2	1789,	830,377	17	0

The

The rise in the years 1785 and 1786, may be attributed to the rage for every thing English, which, I believe, was then pretty much at its height; the moment the honour of the nation was secured by wiping off the disgraces of the war of 1756, by the success of the American one, the predilection for every thing English spread rapidly. In order to shew the proportion which our export of manufactures to France bears to our exports to all the world, I shall insert the total account by the same authority.

	£.	s.	d.		£.	s.	d.
1786, -	11,830,194	19	7	1789, -	13,779,740	18	9
1787, -	12,053,900	3	5	1790, -	14,921,000	0	0
1788, -	12,724,719	16	9				

We know that all these sums are incorrect; but we may suppose the incorrectness as great one year as another, and that therefore the comparison of one year with another may be tolerably exact. The following French accounts have been taken with singular attention; and as duties have been levied on every article, the amount may be more, but cannot be less.

French Account.

Imports from England into France, in 1788.

	liv.
Woods, coal, and raw materials, of which coal near 6,000,000 liv.	16,553,400
Other raw materials, not the direct product of the earth, ———	2,246,500
Manufactured goods, ———	19,101,900
Manufactured goods from foreign industry, ———	7,700,900
Liquors (<i>boissons</i>) ———	271,000
Eatables (<i>comestibles</i>), such as salt meat, butter, cheese, corn, &c. ———	9,992,000
Drugs, ———	1,995,900
Groceries, ———	1,026,900
Cattle and horses, ———	702,800
Tobacco, ———	843,100
Various articles, ———	187,200
West India cotton, and West India goods, none. ———	
	<hr/> 60,621,900

Exports from France to England, in 1788.

	liv.
Woods, coal, and raw materials, ———	334,100
Other raw materials, not the direct product of the earth, ———	635,200
Manufactured French goods, ———	4,786,200
Manufactured goods from foreign industry, ———	2,015,100
Liquors, ———	13,492,200
Eatables, ———	2,215,400
Drugs, ———	759,100
Groceries none, ———	
Cattle and horses, ———	181,700
	<hr/>
	Tobacco,

Tobacco,	—	—	liv. 733,900
Various articles,	—	—	167,400
West India cotton,	—	—	4,297,300
West India goods,	—	—	641,100
			<hr/> 31,154,500

Explanation.—All manufactured goods, both English and foreign, imported by the English merchants, have been under-rated about one-twelfth, which will add 3,238,800 liv. The French exports must also be increased for smuggling, &c. &c.; so that there is great reason to think the real account between the two nations may be thus stated:

Exports from England to France,	—	liv. 63,327,600
— France to England,	—	33,847,470
		<hr/> 29,480,130
Balance against France,	—	
		<hr/>
Total Exports of England to France in 1789,	—	liv. 58,000,000
		<hr/>
Ditto of English manufactures in	1787,	— 33,000,000
	1788,	— 27,000,000
	1789,	— 23,000,000

Hence it appears, that the two custom-houses do not differ essentially in their accounts.

Before I offer any observations on these accounts I shall insert a few notes I made at some considerable towns of the intelligence I received personally.

1787.—ABBEVILLE.—In discourse upon the effect of the new treaty of commerce with England, they expressed great apprehensions that it would prove extremely detrimental to their manufactures. I urged their cheap labour and provisions, and the encouragement their government was always ready to give to manufactures: they said, that for their government nothing was to be depended upon; if their councils had understood the manufactures of the kingdom, they certainly would not have made the treaty upon such terms; that there were intelligent persons in their town who had been in England, and who were clearly of opinion, that the similar English fabrics were some cheaper and others better, which, aided by fashion in France, would give them a great advantage; that provisions were by no means cheap at Abbeville, and the workmen in several branches of their fabrics were paid nearly as much as in England, without doing the work equally well, at least this was the opinion of some very good judges; and lastly, that all Abbeville are of this opinion.

AMIENS.—

AMIENS.—I had here some conversation to the same purport as at Abbeville; the whole town I was assured had been alarmed from the first rumour of the terms on which the treaty of commerce had been concluded; they are well convinced that they cannot in any one instance, as they assert, stand the competition of English goods. On my asking what reason they had for such an idea, the person I conversed with went into a warehouse, and bringing a piece of stuff and another of flannel, they were, he said, English, and from the price at which they were gotten before the treaty, he drew the conclusion; he was also, he said, well informed of the prices in England. In the cotton fabric, he said, the superiority was yet greater; in a word, that Amiens would be ruined, and that on this point there was but one opinion.

The manufacturers of all countries are full of these apprehensions, which usually prove extremely groundless. In all probability the effect would be as expected, if a counter stream of emulation and industry did not work against it. The introduction of English fabrics may be hurtful for a time, but in the long run may be beneficial, by spurring up the French manufacturers to greater exertions and to a keener industry.

BOURDEAUX.—The intercourse between this port and England has been increased a great deal since the treaty. Warehouses of English goods are opened. The article which has hitherto sold the best, and quickest, is that of the Staffordshire potteries; the quantities of these which have been sold is very great: but the hardware sent hither has been found so dear, that it could not be sold in competition with French and German, except in a very few articles. Of sadlery there are several shops opened that have sold largely. Beer has been tried, but would not do; the Dutch is still preferred for the West-Indies as cheaper; that of England has been sold at 90 liv. the barrique, of 250 French bottles, and some of it arrived so bad as not to be merchantable. Wine has increased in its export to England, but not so much as was expected; before the treaty it was 8000 tonneaux a year, and it has not risen to 12,000; however, the course of exchange is against England $\frac{1}{4}$ th, and wine, owing to the present failure of the crop, has increased in price 50 per cent. Brandy has also increased.

The English take only the two first qualities of wines—or, rather, they are supposed to do so; for their merchants established here mix and work the wine sent in such a manner, that the real quality of it is unknown: this is the account given us. Those two first sorts are now at £.20 to £.22 a barrique, which is 250 French bottles, and 270 English ones. The other qualities are sold from £.15 to £.18, port charges, cask and shipping included; freight to London is 50s. a ton, besides 15 per cent. primage, average, &c. The French duty is 28 liv. the tonneau, which has been lowered to 5 liv.

5 liv. 5s. from last October to the first of January next, a regulation which it is said will not take place longer.

BEAUVAIS.—The opinion universal among the manufacturers here is, that the English fabrics are so superior in cheapness, from the wise policy of the encouragements given by government, that those of Beauvais, should they come in competition, must sink; so much of the fabrics here as are for the consumption of the lower people might perhaps stand it, but not any others; and they think that the most mischievous war would not have been so injurious to France as this most pernicious treaty.

LILLE.—I no where met with more violence of sentiment, relative to this treaty, than here; the manufacturers will not speak of it with any patience; they wish for nothing but a war; they may be said to pray for one, as the only means of escaping that ideal ruin, which they are all sure must flow from the influx of English fabrics to rival their own. This opinion struck me as a most extraordinary infatuation; for in the examination which took place at the bars of our Houses of Lords and Commons, this is precisely the town whose fabrics were represented as dangerously rivalling our own, particularly the camblets of Norwich; and here we find exactly the counter part of those apprehensions. Norwich considers Lille as the most dreadful rival, and Lille regards Norwich as so formidable to her industry, that war and bloodshed would be preferable to such a competition. Such facts ought to be useful to a politician; he will regard these jealousies wherever found, either as impertinence or knavery, and pay no attention whatever to the hopes, fears, jealousies, or alarms, which the love of monopoly always inspires, which are usually false, and always mischievous to the national interests, equally of every country.

NANTES.—In conversation here on this treaty with some very respectable commercial gentlemen, they were loud against it; insisted that France sent no fabrics whatever to England in consequence of it, not to the amount of a single sol; some goes, and the same went before the treaty; and that England has not imported more wine or brandy than usual, or at least to a very small amount; we know at present that this was not correct.

ROUEN.—The quantity of merchandize of all sorts that has been imported here from England since the treaty, is very considerable, especially Staffordshire hardware, and cotton fabrics, and several English houses have been established. They consider the treaty here as highly detrimental to all the manufactures of Normandie.

I am better satisfied with the real fact than if it were, as the Chamber of Commerce of Normandie imagined, much more in favour of England; for as the benefit is more likely to last, so the treaty is more likely to be renewed; and consequently peace between the two kingdoms to be more durable. The
balance

balance of the manufacturing account does not exceed 14 millions, which is very far short of the French ideas, and must, in the nature of things, lessen. The 18 millions of raw materials and coals, instead of being an import hurtful to the interests of French industry, is beneficial to it; and they themselves wisely consider it as such, and lamented the old duties on the import of English coal, asserting, that there ought to be none at all. Here are 10 millions of imports, and a balance of eight in direct objects of agriculture, as corn and meat. If a people will manage their agriculture in such a preposterous manner, as not to be able to feed themselves, they should esteem themselves highly obliged to any neighbour that will do it for them. Raw materials, including drugs, with cattle, corn, and horses, very nearly account for the whole balance, great as it is, that is paid on the total to England; and as such objects are as much for the advantage of France to import, as for the benefit of England to export, the whole trade must, both in extent and balance, be deemed equally reciprocal, and of course equally tending to advance the prosperity of each kingdom. There is, however, a circumstance in which matters are very far from being reciprocal, and that is, in payments. The French are paid for their goods, whatever these may be, according to agreement; but that is very far from being the case with the complaints against the mode of dealing in France, not only in respect of payment, but also of want of confidence, since their goods, fairly executed, according to patterns agreed on, are seldom received without dispute or deduction: and while they cheerfully do justice to the punctuality of the Americans, Germans, &c. they put very little value on the French trade, speaking in general. It is the same with Birmingham, whose merchants and manufacturers assert strenuously, that the commercial treaty has been of *no* service to their town; the French having taken as largely their goods, by contraband, before the treaty, as at present, through a different channel; with this change, that the Dutch, Germans, and Flemmings, with whom they dealt before, paid better than the French. These circumstances are great deductions from the apparent merit of the treaty, which cannot be fairly estimated, unless we could know the amount of our exports sent out clandestinely before it was concluded. The manufacturers are certainly the best judges; and they unite, with one voice, throughout the kingdom, either to condemn it, or at least to assert its having been a mere *transfer* from one channel to another, and not an *increase*. The benefit of it, however, as a political measure, which tends to establish a friendship and connection between the two countries, cannot be called in question, with any propriety; for the mere chance of its being productive of peace, is of more consequence than ten such balances, as appears on the foot of the above-mentioned account.

C H A P. XIX.

Of the Manufactures of France.

PICARDIE—*Abbeville.* **T**HE famous manufacture of Vanrobais has been described in all dictionaries of commerce and similar works ; I shall therefore only observe, that the buildings are very large, and all the conveniencies seem to be as compleat as expense could make them : the fabric of broad cloths is here carried on upon the account of the master of the establishment, from the back of the sheep to the last hand that is given. They assert, that all the wool used is Spanish, but this must be received with some degree of qualification. They say that 1500 hands are employed, of which 250 are weavers ; but they have experienced a great declension since the establishment of the fabric at Louviers, in Normandie. They have several spinning jennies, by which one girl does the business of 46 spinners.

An establishment of this kind, with all the circumstances which every one knows attended it, is certainly a very noble monument of the true splendour of that celebrated reign to which *Monf. de Voltaire* justly enough gave the title of *Age* ; but I have great doubts whether it is possible to carry on a manufacture to the best advantage, by thus concentrating, in one establishment, all the various branches that are essential to the completion of the fabric. The division of labour is thus in some measure lost, and entirely so in respect to the master of each branch. The man whose fortune depends entirely on the labour of the spinner, is more likely to understand spinning in perfection, than he who is equally concerned in spinning and weaving ; and it is perhaps the same with respect to dressing, milling, dying, &c. when each is a separate business each must be cheaper and better done. The appointment of commis and overseers lessens, but by no means gets rid of, the difficulty. In viewing a manufacture therefore I am not so much struck with that great scale which speaks a royal foundation, as with the more diffusive and by much the more useful signs of industry and employment, which spread into every quarter of a city, raise entire streets of little comfortable houses, convert poor villages into little towns, and dirty cottages into neat habitations. How far it may be necessary when manufactures are first introduced into a country to proceed on the plan followed by *Louis XIV.* I shall not enquire, but when they are as well established as they are at present, and have long been in France, the more rivals in smaller undertakings, which these great establishments have to contend with, the better it will generally be found for the kingdom, always avoiding

avoiding the contrary extreme, which is yet worse, that of spreading into the country and turning what ought to be farmers into manufacturers.

Besides fine cloths, they make at Abbeville carpets, tapestry, worsted stockings, barracans, a light stuff much worn by the clergy, minorquès, and other similar goods. They have also a small fabric of cotton handkerchiefs.

AMIENS—Abounds with fabrics as much as Abbeville; they make cottons, camblets, calimancoes, minorques, coarse cloths; there is scarcely any wool worked here but that of Picardy and a little of Holland, none of England, or next to none; they would get it they say if they could, but they cannot. I examined their cotton stockings carefully, and found that 4 or 5 livres was the price of such as were equal to those I had brought from England, and which cost at London 2s. 6d. this difference is surprizing, and proves, if any thing can, the vast superiority of our cotton fabrics.

BRETEUIL.—They have a manufacture here on a small scale of scythes and wood hooks, the former at 45*s*. and the latter at 30*s*. the iron comes from St. Diziers, and the coals from Valenciennes. Nails are also made here for horse-shoes at 8*s*. the lb. but not by nailors who do nothing else.

ORLEANS.—The manufactures are not inconsiderable, they make stockings of all kinds, and print linens; a fabric of woollen caps has been established here since Louis XIV.'s time, in which two houses are employed; the chief we viewed. It employs at home about 300 working hands, and 12 to 1500 others. The caps are entirely made of Spanish wool, 3 oz. of yarn make a cap; they are all for exportation, from Marseilles to Turkey and the coast of Africa, being worn under turbans; in dressing they extract the grease with urine, full and finish in the manner of cloth.

The sugar refinery is a considerable business, there are 10 large and 17 smaller houses engaged in it; the first employ each 40 to 45 workmen, the latter 10 to 12; one of the principal, which I viewed, makes 600,000 lb. of sugar, and the rest in proportion. The best sugar is from Martinico, but they mix them together. Rum is never made from melasses, which is sold to the Dutch at 3*s*. the lb. the scum is squeezed, and the refuse is spread thick on meadow to kill moss, which it does very effectually. The price of raw sugar is 30 to 45 liv. per 100 lb. The coal they burn is from the vicinity of Moulins, in the Bourbonnois. Trade in general is now brisk here.

ROMORENTIN.—A fabric of common cloths for liveries and soldiers, carried on by private weavers, who procure the wool and work it up; they are at least 100 in number, and make on an average 20 pieces each in a year; it is sent to Paris. At Vatan there are about 20 of the same weavers and 300 spinners.

CHATEAURoux—A fabric of cloth, which two years ago, before the failure of the master, gave employment to 500 hands, boys included, and to 1500 to 1800 spinners in this and the neighbouring provinces; it is a *Manufacture Royale*, like that at Abbeville, of Vanrobais, by which is to be understood an exemption for all the workmen employed within the walls from certain taxes, I believe *tailles*. Some gentlemen of the town keep at present 100 hands at work in the house, and the spinners depending on that number, in order that the fabric might not be lost, nor the poor left entirely without employment; there is true and useful patriotism in this. The cloths that were made here were 1 to $1\frac{1}{4}$ aulns broad, which sold at 8 liv. to 23 liv. the auln; they make also ratteens. In the town are about 80 private weavers, who make nearly the same cloths as at Romorentin, but better; sell from 8 liv. to 18 liv. the auln, $1\frac{1}{4}$ broad; these private fabrics, which do not depend on any great establishment, are vastly preferable to concentrating the branches in one great inclosure; the right method of remedying such a failure as has happened here, is to endeavour by every means to increase the number of private undertakers. The cloths are all made of the wool of the country now 20 to 37s. the lb. it has been dearer for two years, and ten years ago was to be had for 15 to 20s. from the 24th of June it is sold at every market and in large quantities; manufacturers come from Normandie and Picardy for twelve days together to buy wool, wash, and send it off.

At two leagues from Chateauroux are iron forges which let at 140,000 liv. a year (£.6125), belonging to the Count d'Artois.

LIMOGES.—The most considerable fabric here is that of druggets, the warp of which is of hemp thread, and the woof of wool, 100 looms are employed by them. Siamoise stuffs are made of hemp and cotton, sold at 30 to 48s. an auln; there are about 1000 or 1100 cotton spinners in the Limosin, also various mixed stuffs of silk and cotton, and silk and thread under many denominations, for gowns, coats, waistcoats, breeches, &c. from 4 to 6 liv. the auln. Some stuffs, which they call China, are rather dearer; a gown selling for 4 louis, but of silk gauze only 2 louis; this fabric employs about 20 looms, worked each by 3 or 4 people, boys included. I took many specimens of these fabrics, but in general there is a great mixture of shew and finery with coarseness of materials and cheapness of price, not at all suitable to an English taste.

They have also a porcelane manufacture, purchased by the King two years ago, which works for Seve; it gives employment to about 60 hands; I bought a specimen, but nothing they make is cheap, and no wonder, if the King is the manufacturer.

They

They have in the generality of Limoges, which includes the Angoumois, seventy paper mills that manufacture all kinds; they are supposed to make every day to the quantity of 19 *cuves*, the contents of which vary according to the sort of paper. A cuve of 130lb. will make $6\frac{1}{2}$ reams of large and fine paper, but double that quantity of other sorts; they calculate that a mill can work about 200 days in a year, festivals and repairs excluded; this makes at a cuve a day 454,200lb. for a year's work of a mill, and 31,794,000lb. for the whole generality, and they value it at 20*s.* the lb. which makes as many livres, or £.1,390,987. They consider the manufacture as greatly overloaded with an excise, which amounts to about $\frac{1}{8}$ th part of the value, but they have an allowance for all they prove to be designed for exportation, in the nature of our drawbacks; the manufacture has increased notwithstanding the duty. They reckon here, and in all the paper mills of France, the cylinder for grinding the rags, which they call *Dutch* (and which we have had so long in England), as a new and great improvement. Each mill employs from 12 to 20 hands, including carters; they reckon that half the paper is exported, much to the Baltic, and some they say to England.

They have also in this generality 40 iron forges, some of which employ 100 people, one is a foundry for casting and boring cannon.

BRIVE.—A silk fabric has been established here about five and twenty years, silk alone is wrought in it, and also mixed with cotton, and gauzes of all kinds are made; they say they have discovered a manner of dying raw silk, with which they make plain gauzes $\frac{3}{8}$ ths of an auln broad and 11 long; the price varies according as they are *chinées* (waved), or not; a piece white, striped or not, is 54 liv. (2*l.* 7*s.* 3*d.*) coloured ones 60 liv. (2*l.* 12*s.* 6*d.*) and the *chinées* 80 liv. (3*l.* 10*s.* 0*d.*); they make also a thick shining stuff in imitation of Manchester, at 6 liv. the auln, also silk and neck handkerchiefs of a German taste, sold chiefly in Germany and Auvergne. A merchant also at Basle, in Switzerland, is so good a customer as to have taken 1000 dozen of them. They have 60 or 80 looms constantly at work in the town; the weaver having his loom in his house and supplied with the material from the manufactory, and paid by the piece; each loom employs five people, women and children included. They use only French silk, which though not so shining as the Italian, is, they say, stronger, bears the preparation, and wears better.

They have also here a cotton mill and fabric which is but in its infancy, has only one combing machine, and three double ones for spinning; they say that this machine, with the assistance of 15 people, does the work of 80; this undertaking has been established and is carried on by Messrs. Mills and Clarke, the former an Englishman from Canterbury, the latter from Ireland, both induced by encouragements to settle in France.

SOUILLAC—*Payrac*.—No manufactures whatever in the country.

CAHORS.—Some small manufactories among them, one of woollen cloth; some years ago it had near 1000 workmen, but the company disagreeing, a lawsuit ensued, so that it decreased to 150; the spinners are chiefly in the town; work up both French and Spanish wool, but the latter not of the first quality. They shewed us however some cloth, made as they say entirely of Spanish wool, at 3 liv. 10s the lb. which is not so good as their ratteens, made with $\frac{2}{3}$ wool of Navarre and Rouffillon, and $\frac{1}{3}$ Spanish; they make some cloths for the home consumption of the province entirely with the wool of Navarre, an auln broad, at 11 liv. the auln; ratteens $\frac{3}{4}$ of an auln broad, at 22 liv. the auln; a second sort of ratteens, made with French wool, an auln broad, 11 liv. the auln.

CAUSSADE.—This country is full of peasant proprietors of land, who all abound very much with domestic manufactures; they work their wool into common cloths and camblets, and all the women and girls spin wool and hemp, of which they make linen; there are weavers that buy about two quintals of wool, pay for the spinning, weave it, and carry the cloth to market, and there are merchants that buy the superfluity for export.

MONTAUBAN.—The woollen manufacture here is of some consequence, consisting of common cloths, *croisées*, half an auln broad, and several sorts of stuffs; they give the epithet *royale* to one house, but in general the spinning and weaving are carried on both in the town and the country, not only on account of the master manufacturers, but also by private weavers, who make and carry their stuffs to market undressed; the people of the fabric I viewed assert, that they use only Spanish wool, but this is every where in France a common assertion by way of recommending their fabrics, and has been heard in those, known on much better authority to use none at all; another circumstance to be noted is, that the wool of Rouffillon goes in common manufacturing language under the denomination of Spanish; I saw their raw wool, and am clear, that if it is Spanish it is of a very inferior sort; the quality and the price of the cloths speak the same language; they dye the cloth and not the wool previously; they sell their broad cloths, which are $\frac{5}{4}$ ths of an auln wide, at 17 liv. the auln, (14s. 10½d.) and the *croisées* at 5 liv. 10s. Twelve hundred people are said to be employed by this fabric.

The silk manufacture is also considerable; they work up not only the silk of the environs, but of the upper country also; they make stockings and small stuffs, but the former the chief; it is executed lik the woollen fabric, both by master manufacturers and by private looms; a stocking engine costs from 15 to 20 louis, and a workman can earn with it to 3 liv. a day.

TOULOUSE—

TOULOUSE—Has a woollen and a silk fabric; in the first are worked light stuffs, and has about 80 looms, which are in the town; in the other stockings, stuffs, damasks, and other fabrics, worked in flowers; about 80 looms also.

ST. MARTIN.—There are here ten manufacturers houses, one of which made last year 700 pieces of woollen stuffs, each six aulns long; on an average each house 500 pieces, chiefly bays, says, and other stuffs, the chain of thread; some for home consumption, but chiefly for exportation to Spain. Their best is 4 liv. 15/ the canne of 8 palms, and 10 palms to the auln, half an auln broad. Other stuffs 3 liv. 15/ dye in all kinds of colours. There are plenty of spinners of both thread and wool; weavers and spinners are spread over the country, but the combers and carders are at home. They use some Spanish wool from the Navarre hills at 30/ the lb. this year 33/ but very dear.

ST. GAUDENTZ—Manufactures several sorts of stuffs, both of wool alone, and wool and thread mixed; the principal fabric is a light stuff called Cadis, the greater part of which is exported to Spain.

BAGNERE DE LUCHON.—At half a league from this place is a manufacture of cobalt, it is said, the only one in the whole kingdom, which was all supplied, before the establishment of this fabric, by a Saxon gentleman, from the works in Saxony; and what is now made here is used at home and exported as Saxon cobalt. The ore is brought from Spain at a very high price, from a mine in the Pyrenees, not more distant in a strait line than six leagues, but the road is so rocky that the ore is brought by the valley of Larbousse, which takes up a day and a half. The ore is not found in veins, but in lumps, (*rogons*,) so that it is often lost and found again.

A remarkable circumstance, and hardly credible, is their employing ore also from Styria, which is shipped at Trieste for Bourdeaux, and brought by the Garonne to Toulouse, and hither by land, at the expence of 45/ the quintal. They use also some from Piedmont; of these different ores that from Styria is the worst and the Spanish the best; they cost at the manufactory, one with another, 300 liv. to 360 liv. the quintal; the Spanish ore is the first described by Mons. Fourcroy, the grey or ash coloured; they do not melt these ores separate but mixed together.

The process pursued in this manufactory would be tedious to ninety-nine hundredths of my readers, I shall therefore only give a few heads from the memoranda I made after having viewed it attentively: the reputation of the Duc de la Rochefoucauld, as an able chymist, united with his rank, induced the director of the fabric to explain the matter fully; I attended him in viewing the work: they first pound the ore into powder, which is placed in a sort of spoon in a furnace to roast, for the purpose of expelling the arsenic by sublimation;

limation; it is received in a canal or chimney, which winds horizontally; by an opening in the wall a man enters for gathering this arsenic; this is an operation very dangerous to the health, yet for 45*s.* to 3 *liv.* a day they get men to execute it, who for a preventative of the ill effects swallow some milk, and keep cloths to their mouths and noses dipped in milk, and kept constantly wetted. The cobalt remains after this roasting in a greyish black calx; bismuth is found mixed with it, which is found at the bottom of the spoon. They have another way also, which is that of fusing the cobalt, thus purged of its arsenic, in order to get the regulus; I saw some large pieces of regulus with bismuth adhering, which were in all probability procured in this method; hitherto they have not applied the bismuth to use, nor tried whether it would answer to send it to those places where it is worked.

Having thus obtained the calx of the cobalt, they mix it with pot-ash and roasted flints as a flux, in large crucibles, which are placed six together, in a large long furnace, the upper part of which is arched to an angle, a current of air passing; the furnace is heated with dry beach wood billets. Some chymists assert, that there should be of flints 3 to 1 of the cobalt, but they use 16 to 1, which they say is the Saxon method, and these flints contain some small portion of cobalt; it requires a fierce fire of twelve hours to reduce the calx of cobalt to a glass; when this is nearly in a white fusion (as they term it,) they take it out with iron ladles, and throw it into a vessel constantly supplied with fresh water for cooling, from which it is taken to a pounding mill and beat to powder, in which operation they almost always find some drops of regulus, which are taken out; when pounded it is carried to a kind of table three stories high, streams of water are turned on to it, while two men at each table stir it; this is for freeing the cobalt from impurities; it passes with the water into a large tub pierced at different heights, that the water may flow away and leave the cobalt at the bottom; but as this water is in some measure tinged with this precious material, it is not suffered to run to waste; a large cistern is under the whole room into which it is received, and whence it is drawn off from time to time; the cobalt thus gained is of the worst quality.

The washed cobalt is carried to a mill, which grinds it under a stone, the powder is received in a large vessel of water, which is made by trituration to imbibe the tincture, and is hence drawn off four times into as many vessels, that the water may deposit the material: The powder thus gained is carried to the drying room, where it is dried in long shallow trays, and then reduced to a finer powder by sifting; in which state it is so fine that they water it with a gardener's rose to prevent its being blown away, in which state it is in order to pack into casks for sale.

The

The motion to the whole machinery is given by two undershot water-wheels.

Vicinity to the Spanish mine, and cheapness of wood, were the inducements to establish this fabric here; they now make pot-ash, which was formerly imported from the Baltic, and cost 40 liv. the quintal, but they can make it here for 12 liv.

NARBONNE.—A manufacture *royale* of silk stuffs, the master of which is a bankrupt. This is the second of these privileged establishments which I have found in the same situation; Chateauroux the former. It should seem that government never interferes by privileges but to do mischief.

BEZIERS.—A small fabric of silk stockings.

MONTPELLIER.—Considerable fabrics of blankets, silk handkerchiefs, verdigrease, and many other articles.

NISMES.—This is one of the most considerable manufacturing places in France; they make a great variety of stuffs, in silk, cotton, and thread, but the first is the great manufacture; these are said to maintain from 10 to 15,000 hands; for the intelligence varied between those numbers. Silk stockings are said to employ 2000; handkerchiefs are a considerable article, printed linens, &c.; in the last there are workmen that earn 7 or 800 liv. a year.

GANGE.—The most noted manufacture of silk stockings in all France; they make them up to 36 liv. a pair.

VIGAN.—Silk stockings, and silk and cotton vests.

LODEVE.—The principal manufacture here is cloth for the uniforms of various regiments in the French army; 6000 men are thus employed. They make also silk stockings and vests of cotton, but no cloths for the Levant; 60 quintals of oil are consumed in the town every week in the year.

BEG DE RIEUX.—The manufactures here are the famous cloths called *Londrins*, which are exported to the Levant; they are made of the wool of Roussillon and Narbonne; also fine cloths of a thicker staple, and silk stockings. The villages in the mountains are all employed in this manufacture.

CARCASSONNE.—Londrins the great fabric here also; the master manufacturers give the materials to the weavers, who are paid by the piece, and thus the manufacture spreads into the country both spinning and weaving; they are made of Roussillon and Narbonne wool, which goes by the name of Spanish, 46 inches wide, the *l'aune* 8 pous. They have also established a small fabric of fine cloths, which they term *à façon de Louviers*, at 10 liv. an auln, but not comparable to the original.

I should here observe, that these *Londrins*, of which at all these towns I took patterns, are a very light, beautiful, well dyed, bright cloth, that have had, and deservedly, from quality and price, the greatest success in the Levant. I saw

the wool they are made of, and should not have known it from a good specimen from the South Downs of Suffex.

BAGNERE DE BIGORE.—They make here some stockings and woollen stuffs, but not to any amount.

PAU.—A considerable manufacture of linen handkerchiefs, with red cotton borders, also of linen for shirts, table-cloths, and napkins; the flax is raised chiefly in the country around; the fabric is spread into the country in every direction; much exported to Spain and to America, by way of Bourdeaux. The handkerchiefs are from 36 to 72 liv; the dozen, my specimen at 42*s*. each, and by the dozen 42 liv. to 48 liv. the square 3 paus $3\frac{3}{16}$. The linen for shirts is of the same breadth, and the price is from 50*s*. to 6 liv. the auln. A table-cloth and twelve napkins they call a service, and costs from 36 to 150 liv. I examined all, and thought them on the whole very dear, for they make hardly any thing tolerably fine.

ANSPAN.—The Pau linen manufacture is here also on a smaller scale.

AIRE.—A small manufacture of porcelane, or rather earthen-ware, a cup and saucer for 8*s*. also of linen for the table and shirts.

LEITOUR.—There is here a tannery, which was twenty-five years ago not an inconsiderable manufacture, that is, before the excises on leather were laid, but now reduced to less than one fourth of what it was; at that time it used 37,000 quintals of bark, and dressed 18,000 skins, but now only 4000. The King's wood near the town, which is extensive, yields the bark, the price 40 to 50*s*. the quintal; their water-mill grinds 100 quintals a day; the bark cakes for fuel sell at 6 liv. the 1000. They have 120 tan pits, which give employment to about 100 men. The master of the fabric complains bitterly of the tax, which is 3*s*. the lb. on all sorts of leather, sheep skins excepted, and he is clear that it has destroyed the manufacture. It is paid only when the dressed hides are taken out of the warehouse for sale, by which means the less capital on account of the tax is necessary.

AGEN.—The chief manufacture here is one of sail-cloth, very much decreased since the war, which, while it lasted, gave it an extraordinary vigour; at that time 320 workmen were employed in the house; now it has only 150 in winter. There are now eighteen to twenty combers doing 20 lb. of hemp a day, for which they are paid 8 liv. the quintal; in the war there were forty of them; 360 lb. of hemp per diem is therefore the amount of the fabric. All the hemp used is raised on the banks of the Garonne, and spun in the country, at the rate of 7*s*. the lb. for the best thread. We viewed an apartment with 84 looms (they have 160 in the house), that make eleven ferts of sail-cloth for the royal navy, in general of 22 or 24 inches broad; the first is sold at 44*s*. the auln, the second at 48; to prepare the hemp for combing, they

they grind it under a cylindrical stone in a sort of cistern; it is then divided into two sorts for sails, and into a third for ropes. They have many stone cisterns for bleaching 150 quintals of thread at a time, of which one man does the whole work by means of pumping the *lixivium* at once from the copper into all the cisterns. The weavers are paid $5\frac{1}{2}$ /. the auln on an average.

Besides this fabric of hemp they have one of cotton, which is stopped at present; one of printed linens, which is brisk, and another of serges and other woollen stuffs, which is carried on by private weavers in their own houses.

CHATEAURAUT.—They have a manufacture of cutlery here, in which there is one circumstance that appears rather singular, which is the fabric being carried on with success almost without a division of labour. Every house in several streets is a cutler's shop, with its little forge, tools, grinding-wheel, &c. and the man, with the assistance of his wife and children, makes knives, scissars, &c. &c. executing the whole process himself, which in a large fabric goes through so many hands. As a foreigner I paid more than the fair price for the specimens I bought, yet they were very cheap, vastly cheaper than I could have believed possible with a manufacture carried on in contradiction to a principle which I had erroneously conceived to be essential to cheapness; they make nails also. Fuel is no where cheap in France (unless it be in the foret of the Lyonois), yet here are hundreds of little forges burning, to execute what one would perform at a third of the expence.

TOURS.—The principal manufacture in this city is that of silk; they make flowered damasks and plain stuffs; there is a large building called the *Manufactory Royale*, in which many workmen were once employed, but none at present, as it is found more advantageous to give the silk to the workmen, in order for their weaving it at their own houses, which seems an experiment that ascertains the benefit of these expensive establishments; the whole fabric has however declined exceedingly, and is at present at a very low ebb; nor are the men assured of constant employment, which is the worst circumstance that can attend any fabric. Prices of weaving vary of course with the patterns of flowered silks; one which I saw working, a very full pattern, was paid for at the rate of 7 liv. the auln, the price of the silk 38 liv. the auln, and to make the auln, employed the man, his assistant, and his wife, two days, which earnings may be divided into 40/. a day for the weaver, 20/. for his assistant, and 10/. for his wife, whose business was only to adjust the chain; the breadth $\frac{3}{4}$ of an auln; the workmanship of this silk is therefore between $\frac{1}{5}$ and $\frac{1}{6}$ of the gross value. I saw others working plain silks, in which the women weavers earned 18 to 24/. a day, and men 30/. They have also a fabric of ribbons, of which I bought specimens, but they are beyond comparison dearer than the ribbons of Coventry. We were told that

filk at Tours employed 2000 people, but I believe the number is much exaggerated.

They have some woollen fabrics of no great account.

They have also, as at Chateaurault, many cutlers, who make knives and scissars of a higher price and much better; the specimens I bought appear to be cheap. Nails are an article also which gives employment here; I found that a middling hand would make about 1000 per diem, for which number he was paid 25*s*. It is to be noted, that a day's work in all fabrics means 15 or 16 hours (except the time taken for meals), common labourer 10*s*. and food.

The woollen manufacture of common stuffs is, by some accounts given us, more considerable than that of filk.

AMBOISE.—There is a fabric of steel established here by the Duke de Choiseul; in it are made axes, hoes, files, &c. They say that 200 men are employed, but I saw no signs of more than 100; they work with charcoal, and also with coals from the vicinity of Nantes. They have also a small manufacture of buttons, another of woollen cloth for cloathing the troops, which, however, did not take root; there is at present one of coarse woollen stuffs; for the use of the lower people: these fabrics shew how fostering and powerful is the hand of a prime minister, in fixing what without him would never be fixed at all; had this Duke continued in power, Amboise would soon have become a considerable city.

BLOIS.—A fabric of very beautiful gloves, which employs about 25 hands; here is also the same cutlery as at Tours and Chateaurault; and they make liquorice cakes for coughs, &c. as at Pontefract.

BEAUVAIS.—This is one of the manufacturing towns of France that seems the most brisk and active in business. I viewed the tapestry fabric, of which I had seen some fine specimens in the palace at Fontainebleau; their finest works are in filk as well as in worsted; they employ 150 hands, and have another fabric connected with this in La Marche.

I viewed the callico printing-house of Messrs. Garnierdans and Co. which is upon such a scale as to employ 600 hands constantly; there is no difference between this fabric and similar ones in England, and all the patterns I saw were very common, seeming not to aim so much at elegance or nicety of execution, as at the dispatch of a large undertaking, yet Paris is their principal demand; they print a great quantity of Indian calicoes; their madder is from Alsace. There are three other manufactures in the town, and all four employ about 1800 hands; but the chief fabric is the woollen, which employs 7 or 8000 hands in the town and the adjacent country. They make, under various denominations, coarse stuffs for the cloathing of the country people, for mens jackets and womens petticoats, &c. a truly useful and important

portant fabric, which works only French wool, and in general that of the country. There are also stocking engines at work.

ST. GOBIN.—The fabric of plate glass here is by far the greatest and most celebrated in Europe; the inclosure is great, and the buildings are on a vast scale; 1800 men are employed on the works and in the provision, &c. of wood. I was so fortunate as to arrive about half an hour before they began to run; there is a vast furnace in the center of the building containing the pots of melted *metal*, and on each side of it a row of ovens with small furnaces for casting. An immense table of cast copper, as I judge by my eye (for I did not care to measure any thing), twelve feet long and eight broad, by five inches thick, stands at the mouth of the annealing oven heated by a furnace on each side of it. When every thing is ready for running the glass, a *comis* enters, the doors are bolted, and silence is proclaimed by one of the men striking an iron bar on the ground; if any person speaks but a word after this, he is fined heavily. The furnace, in which is the melted glass, is then opened, and the pots of 18 inches diameter are drawn out; two men, receiving it upon a sort of barrow, wheel it to the table above-mentioned, where an iron crank suspended from a windlass is fixed, and hoisting the metal, is emptied onto the table. A great copper roller is pushed over it, moving on two strips or bars of iron or copper, the thickness of which determines that of the intended plate of glass, for the pot discharging its contents between them, and the roller brought gradually over it, which flattens by its great weight the metal to the thickness of those bars; the glass is then pushed forward from the table into the oven heated to receive it for annealing, or cooling gradually, to prevent cracking. The dexterity, coolness, freedom from confusion, with which every thing is done, was very pleasing.

The grinding house is great; the whole of that operation is performed by hand. The motive for establishing this manufacture here, in a situation by no means convenient for navigation, though the distance is not great, was that alone of the plenty of wood. It is in the midst of a great forest belonging to the Duke of Orleans, hired by the company that carried on the manufacture. All the fuel employed is beach wood, to which circumstance they attribute the superiority of the French glass to that of England.

ST. QUINTIN.—They make here linen, cambric, and gauzes, fabrics that spread all over the country; for all common goods, they use the flax of the country, but for fine ones that from Flanders.

CAMBRAY.—They make gauzes, *cleres*, and some fine cambrics, called *batistes*.

VALENCIENNES.—Laces are here and in all the villages around a very considerable manufacture; that of 30 to 40 lines breadth, for gentlemen's ruffles,

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is from 100 to 216 liv. (9l. 9s.) an auln, with all other prices lower; a pair of ruffles and a frill to 16 louis; the quantity for a lady's head-dress from 1000 liv. to 2400 liv. The poor women who do this exquisite work do not earn more than 20*s.* a day, or at the utmost 30*s.* The fine cambrics are all woven in cellars for humidity of atmosphere.

LILLE.—This is one of the most manufacturing, commercial, and industrious towns in France; there is a *manufacture royale* of fine cloths made of Spanish wool. Three callico printers houses, but not upon a very great scale. Their greatest trade is that of camblets, which employs many hands; they are made of the long combing wool of Holland, Germany, Flanders, and what they can get from England, this being the fabric which uses more English wool than any other in France. They have a cotton fabric of stuffs for linings, &c. another of blankets; also one of silk stuffs, which the proprietor refused to let me see, the only instance of the kind I met with in the course of the journey; one may fairly conclude that he had nothing to shew, instead of the secret he pretended to: add to these a fabric of porcelane.

ST. OMERS.—There is a manufacture of worsted stockings, also of a kind of stuff called *pannes*, but the quantity not considerable. Much wool is spun.

ARRAS.—The only fabric of any consequence is that of coarse thread laces, which find a good market in England.

BEAUVAL.—A considerable manufacture of coarse hemp and linens, sack-ing, &c.

AUMALE.—A fabric, of no great consequence, of coarse woollens for the wear of the common people.

ROUEN.—The Manchester of France. One of the most commercial and manufacturing towns of the kingdom. They say, that at present the velours and *cotton toiles* are the most flourishing. The fabrics spread over all the country, they admit the velverets of England to be much cheaper, but assert their *pass-mentiers* of silk and cotton mixed, to be cheaper than any similar fabric in England; they have also some woollens, but none fine or deserving particular notice. Asserted here that spinning cotton employs 50,000 persons in Normandie.

HAVRE.—Cotton 260 liv. the quintal. The duty on the export of French cotton rather more than 2d. per lb.

PONT A DE MER.—Viewed the *manufacture royale* of leather here, having letters to Mons. Martin the director. It consists of a considerable tannery and curriery; there are 96 fats for tanning, and eighty workmen are employed. I saw eight or ten English curriers; there are forty of them.

The price of raw hides from the butcher is at present 10 to 12*s.* a lb.; a year ago only 6½, which was the price for three or four years past; the rise they attribute

attribute to an arret of the parliament, prohibiting the killing any cow calf, which has made the skins dear, and the high price of meat has had a yet greater effect.

Foreign hides from Buenos Ayres are now 18/. the lb. that were 10/.; they have many from Ireland, which would be the best, if it was not for the careless way of cutting them more than necessary in killing. The Irish are the largest hides.

The bundle of bark is 30 lb. (28 to 32), and the price per 100 bundles, or 3000, is 150 liv. which is about 4l. 4s. a ton; a few years past it was at 80 liv.; they bark all oak of ten years growth, preferring young to what is old. Some hides they dress without lime, in the Jersey way; they dress many hogs hides, and also goats from Sweden. They complain of the excise on leather, assert that there were once forty tanners in this town, but now not twenty, the declension owing to the duty of 3/. per lb.

CAEN.—They make a great deal of silk lace here, also cotton and worsted stockings.

CHERBOURG.—Near this place is a considerable fabric of blown plate-glass, which Mons. Depuy, the director, was so obliging as to shew me; about 350 workmen are employed, but before the American war there were 600; the works at Cherbourg have hurt it, as well as grubbing up the forest belonging to Monsieur. It is now sent to Paris to be polished.

BRETAGNE—Rennes.—Some fabrics, but not of consideration; linen for ship-sails, hats, earthenware, dimities, flamoises, thread stockings: Some years ago one of cotton, established by Pincjon, author of a pamphlet *Commerce de la Bretagne*, but it was not attended with any success, and died with him.

ST. BRIEUX.—Received here some information concerning the linen fabric of Bretagne. The merchants and factors chiefly reside at St. Quintin and Loudeac, some at Pontivy and Uzelles; St. Maloes is said to export to the amount of ten millions. The thread is spun all over Bas Bretagne and bought up at markets, and woven into linen at those towns and their districts; the lowest price is 34 to 38/. the auln; the next 40 to 50/. and some, but little, is made so high as 5 liv. The greatest object in the fabric is bleaching it to a great degree of whiteness, which the Spaniards seem only to regard; to do this the manufacturers are forced almost to rot it. Among other operations to which they subject it, is that of putting it in casks of sour milk for 3 or 4 months, but the linen that is only commonly bleached is strong and excellent; the flax is all produced in Bretagne.

BELLE ISLE to MORLAIX PONTON.—Much spinning of flax through all this country; the flax of their own raising; every farmer enough for the employment of the family; the thread sells at 30/. a lb. at Morlaix.

MORLAIX.

MORLAIX.—Much linen exported; thread sells at 45*s.* the lb. spinning is 12*s.* the lb. I was shewn some fine thread that cost 3 liv. 10*s.* the lb. and which will make cloth of 4 liv. 10*s.* the auln. The linen trade is now very dull, but flourished greatly in the war; the linens here are *toille de menage*; that exported to Spain is here called *toille de leon*, and is whitened till rotten.

NANTES.—Here I am assured that the linen fabric of Bretagne amounts to 24 millions.

Examine some of these linens that are for the Cadiz market; the finest of all is 4 liv. 7*s.* the auln of Bretagne of 50 inches, and $\frac{1}{4}$ ths wide; it has 80 threads in an inch English: 3 liv. 7*s.* the auln; 25 $\frac{1}{2}$ French inches broad, 70 threads to the inch English; they are very white and much beaten.

A considerable fabric established near this city in an island of the Loire, for casting and boring cannon; the coals cost here 34 liv. the 2000 lb. they come by the river from the neighbourhood, and they calculate that the new steam-engine, now erected, will consume 100 liv. a day.

Viewed the cotton manufacture of Monsf. Pellontier, Bourcard and Co. the Prussian Consul, which employs about 200 hands; he spins (by jennies), weaves and prints the cloth, but the conductor of it says, that the Swiss fabrics of the same sort are one-third cheaper, owing to their employing much more machinery, and to their men working far better and harder. Price of the best St. Domingo cotton at present 180 liv. to 200 liv. per quintal.

ANJOU—Angers.—All alive with stocking engines, and an infinity of spinning wheels; the stockings are mostly of thread, but some of wool; they have spinning jennies for cotton; a fabric of sail cloth, and some callico printing.

MAINE.—Le Mans.—Here are etamines, linen, stockings, bleach-grounds, &c. &c.

NORMANDIE.—Allencon.—Great quantities of hemp spun and manufactured in all this country into table-linen, sheets, shirts, &c.

GACE.—Much spinning of flax, which is brought from Flanders, the price 1 liv. 16*s.* the lb. and sell it spun at 4 liv. 10*s.* but varying much according to the fineness; a woman spins a pound in a week.

ELBOEUF.—The fabrics here are chiefly cloths, and by far the greater part are of Spanish wool, a small proportion of that of Roussillon and Berri. The wools of Segovia and the Leonoise are at 5 liv. 12*s.* the lb. and 4 liv. 10*s.* *poid de Viscount*. It is spun in the country for twelve leagues around; the price of spinning is from 10 to 13*s.* the lb. average 11*s.* for which they spin the fine Spanish to the length of 825 aulns of Paris; a good spinner will do a pound in a day, but that is beyond the medium; very few however demand two days. The carder has 6 to 8*s.* a lb.

Monsf. Grande has some jennies, by which a woman spins the work of eight.

DARNETAL.

DARNETAL.—The chief fabrics here are cloths, a façon d'Elbœuf, espagnolettes, flanelles, ratteens. Of these the principal are the espagnolettes of $\frac{5}{8}$ ths breadth, and price 5 liv. 10s. to 9 liv. 10s. for mens waistcoats, ladies habits, &c. The wool is in general from Spain and Berri, but not the Spanish of the first quality; the Berri is as good, or better than the Spanish for this fabric. The spinners are paid 14 to 16s. the lb. for which they spin it to the length of 600 aulns. Carding is 2s. the lb. and no other than carding wool is used here. The weaver is also paid by the pound, at 15s. therefore the weaving and spinning is nearly the same price; many of all these hands are in the country. The master manufacturers here assert, that their fabrics are as good and as cheap as similar ones in England, but they sell none thither.

LOUVIERS.—Monsieur Decretot's fabrics of fine cloths at this place, are, I believe, the first in the world; I know none in England, nor any where else, that can be compared with them; the beauty and the great variety of his productions remind me more of the fertility of Mr. Wedgewood's inventions, than any other fabric I have seen in France. Monf. Decretot brings out something new for every year, and even for every season.

The common cloths of this place are well known; but Monf. D. has now made some of the finest and most beautiful cloth that has ever yet been seen, of the pure undyed Peruvian, or Vigonia wool, if it may be so called, for it is not produced by a sheep; this rises to the vast price of 110 liv. the auln, $\frac{5}{4}$ ths wide; the raw wool is 19 liv. 10s. the lb. or thrice as dear as the very finest Spanish: other fabrics he has made of the wool of the chamois from Persia. The finest cloth he makes of common wool, unmixed, is of Spanish, at 6 liv. 4s. the lb. and the price 33 liv. the auln, $\frac{5}{4}$ ths broad. *Rayé en soie marbre* $\frac{5}{8}$ ths broad, 32 liv. *Castorine rayé en soie*, same price and breadth. Of all these curious fabrics, as well as the wools they are made of, he very obligingly gave me specimens.

View the cotton mill here, which is the most considerable to be found in France. They spin to the length of 40,000 aulns per lb. machinery in this mill saves in labour in the proportion of three hands doing the work of eight. It is conducted by four Englishmen, from some of Mr. Arkwright's mills. This mill cost building 400,000 liv.

Near this town also is a great fabric of copper-plates, for bottoming the king's ships; the whole an English colony.

CHAMPAGNE.—*Rheims.*—There are about 700 master manufacturers here, and 10,000 persons in the town and the country about it, supported by the manufactures. The fabric is not at present flourishing, and the earnings of carders and spinners but one half what they were. The weavers are paid 12 liv. 10s. for a piece of 55 aulns, and $\frac{1}{2}$ an auln broad.

They make here razcastors, marocs, flannels, burattés, the chain of almost every thing of the wool of Champagne; but the rest of Spanish, or that of Berri; and these fine carding wools are combed for most of the fabrics: they use besides these wools much from Bourgogne and Germany, and some from Rome, which are very bad, because the sheep are clipped twice a year, which destroys the texture of the wool. The woollens at Rheims amount to 10 millions, and the trade of wine four or five millions. There are 24,000 pieces of woollen stuffs annually stamped of 50 aulns each, and at the price of 110 to 120 liv. each.

LUNEVILLE.—Here is a fabric of earthen ware, that employs sixty to seventy hands, who earn 20 to 30*s.* a day; but some painters to 24 liv. a week. Common plates by no means good, 3 liv. 10*s.* per dozen.

ISENHEIM to Belfort.—Many fabrics in this country, especially callico printing.

BOURGOGNE—*Dijon*.—Many stocking engines, some spinning of cotton, and some coarse cloths made, but nothing of consequence, for the place does not subsist by manufactures.

MONT CENIS.—These are amongst the greatest iron works in France, and owe their present magnitude entirely to Mons. de Calonne; they were established by Mr. Wilkinson from England, in the same expedition into France, in which he fixed those on the Loire near Nantes. The iron mine is three leagues off, but those of coal on the spot. They cast and bore cannon on the greatest scale, having five steam engines at work, and a sixth building: they have iron roads for the waggons, make coak of coal, a l'Anglois, &c. &c. Here is also a pretty considerable crystal glass work, in which two Englishmen are still left. There is no navigation, as necessary as coals or iron; but the Charolois canal is within two leagues, and they hope it will come here.

AUTUN.—No manufacture.

BOURBONNOIS—*Moulins*.—No fabric.

AUVERGNE—*Riom*.—No fabric, except what cotton is spun, &c. in the general hospital.

CLERMONT.—In the mountains at Royau, &c. wool spun 40*s.* lb. the finest 50*s.* spinning 1lb. coarse wool 10*s.* fine ditto 12 to 16*s.*

MARSEILLE.—Price of cotton, 1789, St. Domingo, 130 liv. the quintal

Martinique,	120
Salonica,	95 to 100
Smyrna,	100 to 115
Cyprus,	100 to 105
Acre,	100 to 110

This place makes soap to the amount of 20 millions a year: the oil from Italy, the Levant, and Tunis.

Castile,

Castile,	36 liv. the quintal
Blue,	36½
White,	37

The trade of Marseille to the colonies not near equal to that of Bourdeaux.

LYONS.—The import of raw silk into all France one million of lb. of 16 oz. The crop of all France the same, but not so good by $\frac{1}{4}$ of the price. The price of good silk 25 to 30 liv. The fabric here $\frac{1}{4}$ of all the kingdom, and its exports in manufactured goods the weight of one million of pounds. There are 12,000 looms, each employing five persons, or 60,000, who earn on an average 25*s.* a day. The men earn by wrought silks 45 to 50*s.*; but on plain ones 30*s.* Of the fabric here $\frac{2}{3}$ of the value is raw silk, and $\frac{1}{3}$ labour. Throughout the kingdom in the hemp and flax fabrics $\frac{2}{3}$ labour and $\frac{1}{3}$ raw material. In the last 20 years the manufacture here has augmented very little, if at all.

They have a prohibitory law against any loom being erected without the city to a certain distance; and at Amiens there is a prohibition against working woollen stuffs by lamp-light, for fear of greasing the stuffs, yet here the finest silks are thus wrought.

The advantageous situation of Lyons, in respect to its two great rivers, has no effect on the transport of its manufactures, for all go by land to Bayonne, Bourdeaux, and Strasbourg, &c. They have here an establishment of Genoese callico printers, to the number of six or seven hundred.

ST. ETIENNE EN FORET.—The iron fabrics now very flourishing, coals almost for nothing, and the same at St. Chaumont; a great ribbon trade also; forty pieces are made at a time by a machine turned by one man.

The following details of French manufactures will explain several of them: they are extracted from the new Encyclopedie, in quarto, now publishing at Paris.

Manufactures of Picardie.

	Looms.	Pieces.	Price. liv.	Total Value. liv.
Camelot poil, ———— —	350	3,000	380	1,140,000
Camelot mi foie, ———— —	300	3,600	160	576,000
——— laine, ———— —	450	3,500	120	420,000
Baracans, &c. ———— —	700	12,000	130	1,560,000
Prunelles foie, ———— —	1,000	10,000	180	1,800,000
——— laine, ———— —	650	7,800	115	897,000
Panne poil, ———— —	800	7,000	240	1,680,000
——— laine, ———— —	950	10,000	120	1,200,000
Velours, mocquettes, trippes damas	450	4,500	180	810,000
A'ençons, etamines, vires, gazes	300	3,600	200	720,000
Serges, minorques, turquoises, &c.	1,200	14,400	180	2,592,000

MANUFACTURES.

Manufactures of Picardie.

Tamises, duroys, grains d'orge,	400	6,000	100	600,000
Serges d'Aumale, Londres, &c. —	2,000	16,000	100	1,600,000
— de Blicourt, Crevecœur, &c. —	1,500	24,000	15	625,000
Draperies fines, — — —	100	1,200	480	576,000
— communes, — — —	600	7,000	60	420,000
Velours de coton, toileries, &c. —	450	6,000	150	900,000
<i>Totals.</i>				
Etoffs de laine, — — —	12,200	139,600		18,098,000
Bas douzaines de paires, — — —	8,500	220,000	14	5,200,000
Toiles, — — —	4,300	60,000	50	3,000,000
	25,000			26,298,000

Wool consumed.

<i>Fleece.</i>		lb.		liv.	
Of the country, — — —		3,220,000	at 22 f.	3,520,000	
From Holland, — — —		180,000	at 40 f.	360,000	
— England, — — —		200,000	at 32 f.	320,000	
— Germany, — — —		100,000	at 22 f.	110,000	
		3,700,000		4,310,000	
<i>Spun.</i>					
Turcoin, — — —		60,000	8 liv. 10 f.	510,000	
Germany, — — —		100,000	7 liv.	700,000	
Poil de chevre, — — —		220,000	5 liv. 10 f.	1,200,000	
Soie, — — —		20,000	35 liv.	700,000	liv.
					7,420,000
Spinning of 3,680,000 lb.					4,310,000
— at 6 or 7 f. the lb. of thread of all sorts at 9 liv. the piece					1,350,000
Weaving 150,000 pieces at 28 liv. the piece, 12,000 looms making each 14 or 15 pieces, and gaining about 280 liv. per annum,					3,420,000
Dyeing the materials spun and not spun, — — —					190,000
Merchant's profits on raw materials and manufacturers, — — —					1,300,000
Value of 150,000 pieces going from the hands of the manufacturer,					17,990,000
Drugs, colours, &c. — — —					500,000
Nett profit, — — —					2,000,000
					20,490,000

Draperies Fines.

Spanish wool 330 bales of 200 lb. at 5 liv. per lb. —	330,000
Sixty-six lb. of wool in a piece of broad cloth, 1000 pieces, and consume 66,000 lb. of wool; the piece of 24 aulns at 25 liv. 600 liv. and for 1000, — — —	600,000

Cotton Velvets.

Cotton 40,000 lb. at 48 f. —	96,000
Spinning, — — —	96,000
Fabrication of 2,860 pieces at 14 f. — — —	60,000
Dyeing, &c. — — —	82,000
Profits, — — —	36,000
	370,000

Linen,

MANUFACTURES.

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Linen, Thread, and Cordage.

	liv.
Hemp for linen, 4, 5, or 600,000 raw, at 30 liv. the 100,	1,350,000
Reduced to 3,000,000 lb. at 7 <i>f</i> . spinning,	1,050,000
Flax 2,000,000 lb. at 40 liv. the 100	800,000
Reduced to 1,200,000 lb. at 10 <i>f</i> . spinning,	600,000
Weaving, 4,300 looms at 90 liv. to 160 liv.	400,000
Seventy thousand pieces at 65 liv. materials,	4,200,000
Hemp and labour on thread, packthread, and cordage	2,000,000
	6,200,000

Boneterie.

Wool of the country, 800,000 lb. at 25 <i>f</i> .	1,000,000
— Holland, 250,000 at 40 <i>f</i> .	500,000

Draperies of the Generality of Rouen.

Flax ——— 100,000 at 10 <i>f</i> .	50,000
Cotton ——— 2,500 at 40 <i>f</i> .	5,000
Materials —	1,555,000
Labour —	3,125,000
Profit —	520,000
	5,200,000
<i>Recapitulation.</i>	
Total value of raw materials,	13,870,000
Labour and profit, —	19,000,000
	32,870,000
50,000 workmen at 140 liv.	7,000,000
50,000 women at 70 liv.	3,500,000
150,000 children at 40 liv.	6,000,000
	16,500,000
Profit —	2,500,000
	19,000,000

	Price per auln.	No. Pieces.	Value.—liv.
Elbœuf, {	Draps, — — —	16 liv. 10 <i>f</i> .	18,000
	Royales, — — —	10 liv.	150
	Calmoucs, — — —	16 liv.	80
	Alpagas, — — —	9 liv.	100
		18,330	9,038,400
Louviers—draps fins, — — —	24 liv.	4,440	3,196,800
Rouen, {	Draps, — — —	14 liv.	80
	Ratines, — — —	12 liv.	120
	Espagnolettes croisees, — — —	5 liv.	760
	— lissees, — — —	4 liv. 10 <i>f</i> .	180
	Flanelles, — — —	2 liv. 10 <i>f</i> .	2,690
		3,830	1,021,190
Darnetal, {	Draps, — — —	18 liv.	370
	Ratines, — — —	12 liv. 10 <i>f</i> .	380
	Espagnolettes croisees, — — —	5 liv.	4,320
	— lissees, — — —	4 liv. 10 <i>f</i> .	800
	Flanelles, — — —	3 liv.	1,350
		7,300	2,470,400
			15,726,790

The draperies of Darnetal may be taken on an average at 2,500,000 liv. blankets not included, which are 4 or 500,000 liv. If every thing is included, the lainages of the Generality will rise to 18,000,000 liv. and linens to the double.

Manufactures of Champagne in 1782, taken by Mons. Taillardat, Inspector of that Province.

Places.	Denominations.	Price per auln.	No. Pieces.	Value.
Chalons.	Espagnolettes, -	3 liv. 10 s.	1,800	226,800
Quippes.	Serges drapées, -	1 16	3,000	322,600
	Draps de Silesia, -	4 10	11,500	2,300,000
	Dauphins and Marocs, -	1 5 to 3 5	27,500	3,100,000
	Perpetuelles, -	3 12	40	7,000
	Droguets, etamines, burats, voiles, -	5 5 to 3 5	22,000	2,800,000
Reims & Environs.	Imperialles flanelles, -	2 to 4 5	500	830,000
	Bluteaux, -	17 to 18 p.	3,960	67,600
	Couvertures, -	20 p.	30,000	600,000
	Toiles de Chanvre, -	1 4 s.	2,300	110,000
	Dauphins and Marocs, etamines, flanelles, ferges, -	1 5 to 3 10	4,500	450,000
Rhetal & Environs.	Draps façon de sedan, -	22 liv.	30	26,400
	Toiles de chanvre, -	1 4	420	20,200
	Toiles de coton and basins, -	1 to 5 liv.	56,000	4,000,000
	Serges, frocs, &c. -	2 15 to 3 10	3,200	310,000
Troyes & Environs.	Draps and ratines, -	6 to 10 10	550	122,400
	Espagnolettes, -	4 liv. 5 s.	1,000	140,000
Chaumont, &c.	Droguets, -	1 10	1,500	100,000
Vancouleurs.	Siamoises, toiles de coton, fil, &c. -	1 15 to 3 10	1,300	180,000
			175,600	15,713,000

Boneterie en Coton.

Looms.—Troyes,	400
Arcys and Aube,	280
In thirty villages near ditto,	300
Vitry la François,	24
Vancouleurs,	30
Chalons,	12
	1046

Each loom makes per annum 100 dozen pairs of stockings or bonets, worth one with another 24 liv. or 104,600 dozen, and 2,510,400 liv. of which $\frac{2}{3}$ ds are labour and profit.

In Wool.

About 12,600 dozens pairs of stockings and bonets at Chaumont, Vignory, Joinville, Vitry, and Chalons, at 50 liv. the dozen, or 360,000 liv.*

Boneterie in all France.

Boneterie of filk,	—	—	—	17,500
Wool,	—	—	—	24,500
Cotton,	—	—	—	14,500
Thread,	—	—	—	7,500
Produce of which 55 to 60,000,000 liv.				64,000

Lace.

The laces they make at Valenciennes employ about 3600 persons, and are an object of 400,000 liv. of which the flax is not more than $\frac{1}{3}$. The thread sells from 24 liv. to 700 liv. the pound. The lace-makers at Dieppe earn 7 or 8 *s.* a day, a few 10 to 15 *s.* There are 8 or 9000 point-makers at and about Alençon. At Argentan they work to 500,000 liv; and in all France about 1,200,000 liv.

Silk.

In 1780, there were in Lyons 1800 to 2000 looms constantly employed on stockings, making 1500 pairs a day, at 9 liv. or 4,000,000 liv. per ann. for 450,000 pairs.

Raw material $\frac{1}{2}$,	—	liv. 2,000,000	In all France, in 1756.—Lyons,	18,000
Labour,	—	1,600,000	Nîmes,	3,000
Profit $\frac{1}{10}$,	—	400,000	Tours,	1,350
		4,000,000	Paris,	2,000
				24,350

Manufacture of Lyons in 1768, extracted from the register of the Capitation and Vingtiemes.

Merchants,	—	410	Ditto in 1788.	
Master workmen,	—	4,202	Looms employed,	9,335
Looms,	—	11,007	Ditto not employed,	5,442
				14,777

Rent of their houses 811,667 liv. Total value of the fabric 60,000,000 liv. of which 18,000,000 liv. labour. Weight of filk 2,000,000 lb. Silk and iron in the Forez of the Lyonnois.

* *Enc. Meth. Man and Art. t. i. 10.*

MANUFACTURES.

The clincaillerie of St. Etienne 4,000,000 lb. of iron, at 21 liv. the 100, price wrought 60 liv. the 100.

The manufacture of arms for export consumes 1,200,000 lb. 60,000 muskets and pistols.

Ribbons amount to 9,000,000 liv.

Woollens at Lodeve in Languedoc.

	Pieces.	liv.
Grisblancs for the troops,	6,000 at 6liv. 10f.	624,000
Blues and reds,	2,000 at 9liv. 10f.	304,000
Draps,	1,000 at 8liv. 10f.	136,000
Pinchinats,	3,000 at 6liv. —	288,000
Croisees,	300 at 9liv. —	43,200
Tricots,	1,200 at 2liv. 8f.	92,800
Ratines,	100 — —	12,000
	<hr/> 13,600	<hr/> 1,500,000

Total French exportation to the Levant 18,000,000 liv. of which 12,000,000 liv. in draperies and bonets façon de Tunis.

Clermont.

Account of a bale of 20 half pieces of *Londrins seconds*.

	liv.
Wool, 550lb. at 38f.	1,045
Lifieres, (lift,)	50
Oil,	36
Spinning,	270
Weaving,	150
Soap,	45
Dyeing,	120
Cocheneal,	198
Total including all other charges,	<hr/> 1,914

Account of 100 bales.

	liv.
Wool,	550,000
Oil, soap, and drugs,	150,000
Carriage, commission, and profit,	110,000
Labour,	390,000
	<hr/> 1,200,000

Woollens

MANUFACTURES.

561

Woollens at Sedan.

			liv.	liv.
Wool,	—	—	376	to 476
Hair,	—	—	13	to 30
Oil,	—	—	12	to 14
Soap,	—	—	4	to 4½
Linen,	—	—	3	to 3
Spinning,	—	—	60	to 90
Weaving,	—	—	34	to 53
Dyeing,	—	—	50	to 100

A piece of black superfine.

		liv.	s.	liv.	s.
Wool for the chain, 42½ <i>en surge</i> , at 4 liv. 8s.	—	188	2	475	4
Ditto for the frame, 65½ <i>en surge</i> , at 4 liv. 8s.	—	287	2		
Carriage of 108 lb. wool,	—			5	8
Spinning,	—			87	18
Weaving 105 aulns, meas. de Brabant, at 10s.	—			52	19
Dyeing,	—			100	0
Wear and tear of implements,	—			14	0
House, clerks, &c.	—			14	0
				887	0
42½ aulns, at 23 liv. 10s.	—	1004	liv. 12s.		
		887	0		
Manufacturer's profit,	—	117	12		

In 1767.

Looms,	—	713
Pieces,	—	8,556
Spanish wool,	—	864,105 lb.
Wool or hair for felvages, &c.	—	133,751 lb.
Oil,	—	161,158
of which olive,	—	144,373
coleseed,	—	19,879
Linen for envelopes, 1,188 pieces of 28,550 aulns.		

Many interesting particulars concerning the fabrics of Normandie, are found in the *Observations de la Chambre du Commerce de Normandie, sur le Traité de Commerce entre la France & l'Angleterre*.

Linens.

In the generality of Rouen are made, in an average year, 500,000 pieces, worth, as they pass from the hands of the manufacturer, 45 to 50,000,000 liv. of which ⅔ds are labour and profits.

Woollens.

The cloths and other stuffs of Louviers, d'Elbœuf, Rouen, Darnetal, Andley, Evreux, and other places in the generality of Rouen, may be estimated in a common year at 34,000 pieces, which are worth at the consumer's price about 20,000,000 liv. half of which is raw material, and half labour and profit.

Cotton.

The *boneterie en coton* at Rouen, amounts to 18,000 dozens of pairs of stockings and caps, and as many more in the country, the value of the whole 1,600,000 liv. to 2,000,000 liv. $\frac{2}{3}$ ds of which are labour and profit. The *badetamerie* of cotton alone, employs in France 15,000 looms.

Sundries.

The other articles of manufacture in Rouen and the generality, such as ribbons, sundry woollens, tanneries, earthen-ware, plating, &c. will raise the preceding sums to 80 or 90,000,000 liv. in a common year, consequently these sundries amount to 16 or 18,000,000 liv. and half of all on an average is labour and profits.

Louviers fabricates annually 4400 pieces of cloth.

Elbœuf fabricates 18,000 pieces of cloths and stuffs.

Darnetal makes 7300 pieces of cloths, ratines, espagnolettes, and flannels, without including couvertures.

Vise makes 8000 pieces of cloth, but the fabric is much fallen; for thirty years together it made 26,000 pieces per annum.

Valognes and Cherbourg were once famous for their cloths, and fabricated to the amount of near 4000 pieces, at present they make 3 or 400.

Lisieux, and an hundred parishes in the environs, fabricate 50 or 60,000 pieces woollen stuffs called frocs, flannelles, &c.

Earnings of Manufacturers.

1787—PICARDIE.—*Montreuil*.—By stockings, 20*s*. a day.

Abbeville.—By cloths, &c. 25*s*.

Amiens.—Cloths, 18*s*. to 25*s*. to 40*s*.

Breteuil.—Iron, 30*s*.

ORLEANOIS.—*Orleans*.—Woollen caps, men 26*s*. boys 7*s*. spinners 14*s*. carders 31*s*. sugar refiners 26*s*.

BERRY.—*Chateauroux*.—Woollens, men 20*s*. boys 8*s*. spinners 8*s*.

LA MARCHE.—Women and girls employed in keeping cattle, spin wool and hemp; for thread of the latter they have 3*s*. the lb. for coarse, 6*s*. for fine;

fine; for wool 3 to 4*s.* the lb.; they must work very hard in the fields to spin 1 lb. of coarse thread in a day; when they work for themselves they give their yarn and thread to a weaver, who makes the stuff at 5 or 6*s.* the auln.

LIMOSIN.—*Limoges*.—Stuffs and china men 17*s.* boys 9*s.* weavers are paid 5 or 6*s.* the auln, and earn 15*s.* a day; in the porcelaine fabric some earn 120 liv. a month.

Brive.—Silks, gauzes, and cotton men 27*s.* boys 5*s.*

GUIENNE.—*Cabors*.—Woollens, men 20*s.* spinners 8*s.*

Montauban.—Silks, women 10*s.* woollens, men 25*s.* spinners 8*s.* comb-ers 30*s.*

St. Martori.—Woollen stuffs, men 24*s.* spinners 8*s.* women 8*s.*

Bagnere de Luchan.—Cobalt, men 27*s.*

LANGUEDOC.—*Nismes*.—Silks, men 20 to 40*s.* a man will make a pair of silk stockings in a day if he is a good hand, he is paid 40*s.* for them, out of which he must pay for the engine and oil for his lamp; the engine costs 4 to 500 liv. women also work at it, common earnings of either, by means of this tool, 30 to 35*s.*

Gange.—Silk stockings, men 32*s.* and some particular hands, by making the finest stockings, up to 36 liv. the pair, will earn 5 liv. a day.

Lodeve.—Cloths, men 28*s.* silk stockings 35*s.* cotton 35*s.* some in cotton are said to earn even to 50*s.*

Beg de Rieux.—Londrins, men 18*s.* silk stockings 35*s.*

GUIENNE.—*Pau*.—Linen, men 24*s.* from 18 to 40*s.* they are paid 20*s.* for weaving a handkerchief.

Navarens.—Flax, a pound before spinning sells for 30*s.* spinning it to a middling degree of fineness adds 30*s.* more, or 3 liv. in all, but much spinning improves it only 20*s.* a good hand will spin a pound a day, in common a woman earns 7 to 12*s.* weavers 15 to 30*s.* generally 20*s.*

Bayonne.—Spinning flax, 10 to 11*s.* a day.

Airé.—Linen 15 to 25*s.*

Leitour.—Tannery 15 to 30*s.*

Agen.—Hemp weavers 15 to 22*s.*

TOURAINNE.—*Tours*.—Silk weavers, men 30*s.* boys 20*s.* women 21*s.* nailors 25*s.*

Amboise.—Steel, men 36*s.* women 18*s.*

ISLE OF FRANCE.—*Beauvais*.—Tapestry, men 40*s.* boys 5*s.* some to 100*s.* calico printers 10 liv. to 24 liv. a week, none under 10 liv. women pencillers 20*s.* a day, pattern drawers to 150 louis a year, several at 100, woollens 20 to 30*s.*

PICARDIE.—*St. Gobin*.—Glass, men 20 to 40*s.*

St. Quintin.—Linen, cambric men 20*f.* spinners 15*f.* and even to 20*f.*

Cambray.—Gauzes, cleres, &c. 20*f.* in general, some 30, and a very few to 40*f.*

Valenciennes.—Lace-makers 20 to 30*f.* for the finest.

Lille.—Woollen stuffs 20 to 35*f.* many to 40*f.*

St. Omers.—Stockings 22*f.* spinning wool, women 9*f.*

Airé.—Spinning wool 9*f.* to 10*f.*

Arafs.—Laces, women earn 12 to 15*f.* a day, stockings 24*f.* to 30*f.*

Beauval.—Weavers of linen 30*f.* spinners 3 lb. at 4*f.* per day, or 12*f.* if good hands.

Aumale.—Weavers 22*f.* women spinners 7*f.*

Rouen.—Weavers 30*f.* by the piece, that is 24 to 40*f.* spinners 8 to 12*f.*

Yvetot.—The poor here, and the same at Rouen, buy their cotton, spin it, and then sell the yarn; at present they give 4 liv. 5*f.* per lb. for the cotton, and when spun sell it at 5 liv. 10*f.* to 5 liv. 15*f.* and 6 liv. and earn in general about 12*f.* a day; children begin at six or seven years old. Very little wool spun, as the whole country is employed on cotton.

Havre.—The country people can buy their cotton at 300 liv. the quintal, which is to the quintal of Paris as 108 is to 100; at Rouen it is 106; they have 40*f.* a lb. for spinning it, and a woman earns 16*f.* a day. I was here assured, that none of the cotton mills of France were on a great establishment, as I should find when I viewed them; much talked of only at a distance.

Pont a de Mer.—In the tannery and curriery here the men earn from 24*f.* to 4 liv. a day.

Caen.—Silk lace, 15*f.* women, some so high as 30.

Bayeux.—Lace of silk and thread, women earn in common 10 to 12*f.* but some 20 to 24*f.*

Cherbourg.—Blown plate glass, blowers 40 to 50*f.* lowest workmen 24*f.*

BRETAGNE.—*Rennes.*—Sundries, 25*f.* a day.

St. Brieux.—Spinning wool 8*f.* to 20*f.* per lb.

St. Quintin, Londeac, &c.—Linen, weavers 9*f.* an auln, and do four in a day of common work, 30 to 36*f.* common wages, spinners 10 to 20*f.* but the latter very uncommon.

Ponton.—Many spinners do not earn more than 5*f.* a day, 10 hours.

Morlaix.—For spinning 12*f.* a lb. and do it in three days, besides family business.

ANJOU.—Weavers 8*f.* per auln, and do three or four a day.

Angers.—Weavers 30 to 35*f.* spinners 5 to 8*f.* more by wool than by cotton or flax, 1 lb. of flax in a day for 6*f.*; 1 lb. of fine cotton, three days to a week, and for 30*f.*

MAINE.—

MAINE.—*Guesceland*.—Spinning hemp, do half a pound at 10*s*. the lb. but a very good spinner will do a pound.

NORMANDIE.—*Allençon*.—8*s*. a day by spinning hemp, and 10, and even to 12 and 15, but this is only for the finest of 56*s*. the auln.

Gacé.—Spinning flax 9*s*. a day, which is rather more than they gain by hemp.

Elbæuf.—Spinning wool 5½ to 11*s*. weavers 30 to 35*s*.

Darnetal.—Spinning wool 8 to 12*s*. a man carding 20 to 28*s*. weaving 24 to 30*s*.

Louviers.—Spinning wool 12*s*. weavers 24 to 35*s*. and the highest wages earned 48*s*.

La Roche Guyon.—Spinning cotton, good ones earn 12 and 15*s*. Spinning hemp 10 to 12*s*. the lb. and one lb. in two days.

CHAMPAGNE.—*Rheims*.—For carding and spinning, are paid by the chain and gain 6*s*. a day, at present 12*s*. when the fabric was flourishing, a weaver, that is a good hand, 20 to 25*s*. a day by the piece, but he has to pay a child, if he has none of his own, 3 or 4*s*. out of it.

BOURGOGNE.—*Mont Cenis*.—Forge men 30 to 40*s*.

AUVERGNE.—*Clermont*.—In the mountains.

VELLAY.—*Le Puy*.—Making lace, earn 4 to 8*s*. a day.

VIVARAIS.—*Pradelles*.—Ditto, 7 or 8*s*. and some up to 20*s*.

Earnings.

Average earnings of all the fabrics, of the men 26*s*.—Of the women 15*s*.—Of spinners, 9*s*.—These earnings are, without any doubt, much under those of similar manufactures in England; where I should apprehend the men earn, upon an average 20*d*. a-day or 40*s*.; the women 9*d*. or 18*s*. and spinners I have shewn (*Annals of Agriculture*, vol. ix.) to earn 6¼*d*. or 12½*s*.—The vast superiority of English manufactures, taken in the gross, to those of France, united with this higher price of labour, is a subject of great political curiosity and importance; for it shews clearly, that it is not the nominal cheapness of labour that favours manufactures, which flourish most where labour is nominally the dearest—perhaps they flourish on this account, since labour is generally *in reality* the cheapest, where it is *nominally* the dearest; the quality of the work, the skill and dexterity of performance, come largely into the account; and these must, on an average, depend very much on the state of ease in which the workman lives. If he be well nourished and cloathed, and his constitution kept in a state of vigour and activity, he will perform his work incomparably better than a man whose poverty allows but a scanty nourishment. There is doubtless great luxury
amongst

amongst the manufacturing poor in England; there is little amongst those of France; this apparent evil has grown so regularly with the prosperity of English fabrics, that I am not too ready to consider it so great an evil, as to demand any laws or regulations to repress it, which have been injudiciously called for by some writers; inconveniencies, indeed, may flow from it, but they are so intimately connected with the sources of prosperity, that to touch them might be dangerous: the hidden benefit is concealed sometimes beneath the apparent evil; and by remedying the inconvenience, the advantage might be lost. It is thus sometimes in the natural body, and I believe often in the political.

It is a remarkable circumstance in the agriculture, or rather in the domestic œconomy of France, that the culture of hemp or flax, for home uses, pervades every part of the kingdom. It is a curious question how far this is beneficial or not to the general interests of the national prosperity. On the one hand, in favour of this system it may be urged, that national prosperity being nothing more than the united prosperity of single families, if any such article of œconomy be advantageous to individuals, it must be so to the nation at large; that it cannot fail of being beneficial to a poor man's family to have the women and children industriously employed on clothing the whole, rather than forced to buy such articles at an expence of money which they may not be able to procure.—By means of industry, thus exerted, a poor family is rendered as independent as its situation admits. All of them are likewise warmer, and more comfortably clothed, as far as linen is concerned, than if it were bought; for whatever demands money will be consumed with much more caution than if the result merely of labour. These arguments are unanswerable; yet there are others, on the contrary, that also deserve attention. If it be true, that national prosperity depends on individuals, and that whatever carries comfort into the cottage of the poor man, adds proportionably to the mass of national enjoyment, it must also be equally admitted, that whatever renders a people nationally flourishing and rich, reflects back on the lowest classes a large share of, and intimate connection in, such wealth and prosperity, consequently, if domestic manufactures of this sort be injurious to the great mass of national interests, in a state of combination, they must, in some measure, be individually so in a state of separation. A modern society flourishes by the mutual exchange of the products of land for the manufactures of towns; a natural connection of one with the other; and it may be remarked, that in proportion as this exchange is rapid from a great consumption, in such proportion will a people generally flourish. If every family in the country have a patch of flax or hemp for its own supply of all the manufactures founded on those materials, this beneficial intercourse of the country with the town, is so far cut off, and no circulation takes place. If the practice be good in flax, it is good in wool; and every family should have a sufficient number of sheep

sheep, to cloath themselves in woollens; and if every little village have its little tanner, the same supposition may be extended to leather. A patch of vines furnishes the beverage of the family; and thus, by simple domestic industry, all wants are supplied; and a poor family, as it would be improperly called, would have no occasion to resort to market for any thing *to buy*. But if it go thither for nothing to buy, it ought to go thither with nothing *to sell*; this part of the theory is absolutely necessary, for the town has the power of buying only in consequence of having that of selling; if the country buy nothing of the town, assuredly the town can buy nothing of the country. Thus it is, that in every combination on these subjects, a minute division of the soil into small properties always attacks the existence of towns, that is to say, of what Sir James Stewart calls the *free bands* of a society. A countryman living on his own little property, with his family industriously employed in manufacturing for all their own wants, without exchange, connection, or dependence on any one, offers, indeed, a spectacle of rural comfort, but of a species absolutely inconsistent with the prosperity of a modern society; and were France to consist of nothing else, the whole kingdom would become the prey of the first invader. Upon such a system all taxes must cease, and consequently all public force be annihilated. The whole routine of life would be as well carried on without, as with money, and he who has of necessity land and commodities only, could pay no taxes but in kind; in other words, could pay none at all. However plausible, therefore, the arguments may be in favour of these domestic manufactures, there are not wanted reasons that militate powerfully against them.

In a case of this kind a reference to fact is more valuable than reasoning. The poor in France abound very much with these fabrics, and are very miserable; the poor in England hardly know such a thing, and are very much at their ease; but in Wales, Scotland, Ireland, and some of our counties most backward in point of agriculture, the system is found; and precisely in the poorest districts of the three kingdoms. It is with regret that I feel myself obliged to differ in opinion so often, on political subjects, from a man of such distinguished abilities as the Count de Mirabeau; but upon this subject he gives an opinion decisively in favour of these scattered domestic manufactures, advancing the following strange assertion; “*Les manufactures réunies, les enterprizes de quelques particuliers qui soldent des ouvriers au jour la journée pour travailler à leur compte ne feront jamais un objet digne de l'attention des gouvernemens.**” If there be truth in this idea, the fabrics established in towns, in which a master manufacturer employs the poor, are good for nothing. Those of Lyons, Rouen, Louviers, Elbœuf, Carcassonne; Manchester, Birmingham, Sheffield, &c. are

* *De la Monarchie Prussienne*, tom. iii. p. 109.

of no account, and do not confer national prosperity. It would be wasting the reader's time to refute formally such opinions. The facts are too notorious, and the arguments too obvious, to dwell upon.

Of the Influence of Manufactures on Agriculture.

NORMANDIE.—*Rouen to Barentin.*—A noble soil and full of manufactures, but the most execrable husbandry I have yet seen; every field a bed of weeds and couch.

Yvetot.—A noble track of land; richer or deeper loams hardly to be seen, but all miserably cultivated; an exception to the common case in France, where fine soils are usually well cultivated: the crops in this country are a perfect contrast to the soil.

Havre.—This whole country, from Rouen, the Pays de Caux, is a region more of manufactures than agriculture. The fabric is what the great population of this district depends on, their farms being but a secondary object. The number of small properties, and consequently population, is very great, which is the reason for the price and rental of land through this country being vastly out of proportion to the products. Landlords also divide their farms according to the demand, as the rise of rent tempts it; but he often finds himself depending for the rent of his land on the prosperity of a fabric. The whole country forms a curious spectacle; a vast fabric, and an immense employment, and population having been absolutely mischievous to agriculture. This has been the result throughout the Pays de Caux, the soil of which may be ranked among the finest in France. Had it been a miserably poor, rocky, or barren territory, the result would have been beneficial, for the fabric would have covered such a district with cultivation. But the farmers of the Pays de Caux are not only manufacturers, but have an inclination also for trade; the large ones engage in commercial speculations at Havre, particularly in the cotton trade, and some even in that of the West Indies. This is a most pernicious and mischievous circumstance; the improvement of their cultivation being never the object or result of their growing rich, but merely the engaging more largely in trade or manufacture. If they get a share in an American adventure, no matter whether thistles and docks cover their fields.

BRETAGNE—*St. Brieux.*—Meeting here with a linen merchant, and some other well-instructed persons, I demanded information concerning the state of husbandry in the central parts of the province, and particularly the districts in which the great linen manufacture (one of the most considerable in Europe) is carried on. All I had seen of the province was such a wretched and almost deserted waste, that I supposed the other parts much better. I was informed, that the

the whole province was alike, except the bishoprick of St. Pol. de Leon; that where the linen fabric was chiefly established, there husbandry was most neglected, from the people depending on their linen alone; that this state of things could not be helped, as it was impossible to attend both to their fabric and their land; and the former being found of the most importance, the latter was left quite neglected; and that the *landes* in the linen parts of the province were enormous.

L'Orient.—Here, in conversation concerning the wastes of Bretagne, I was again assured, that the *landes* were of very great extent in the linen country of Pontivy, Loudeac, Moncontour, and St. Quintin; and that what is cultivated is as rough as any I have seen; for the weavers are amongst the very worst farmers in the province.

Auvergnac.—A person intimately acquainted with every part of the province, informed me, that the linen fabric in Bretagne is almost always found amidst bad agriculture, which he attributed to their always sowing hemp or flax on their best lands, and neglecting corn; but where corn is found, as about this place, they depend on it, and are not equally solicitous for hemp and flax.

Elbæuf to Rouen.—A desert.

M. l'Abbé Raynal remitted 1200 liv. to the Royal Society of Agriculture, at Paris, to be given as a prize on the subject of the following question, *Une agriculture florissante influe-t-elle plus sur la prospérité des manufactures, que l'accroissement des manufactures sur la prospérité, de l'agriculture?* How the writers, who contend for the prize, will decide the question, I shall not inquire; but the facts, which I have here noted, seem to weigh materially towards enabling us to examine it. I take France to have possessed, from 1650 to 1750, the most flourishing manufactures in Europe: they were so considerable, and some of them remain yet so important, as to enable us to appeal merely to facts for an answer to such a question, so far as the example of that kingdom is concerned. That century of prosperous fabrics, what did it effect for agriculture? I may very securely reply, nothing. Whatever accounts I received of the comparison between the former and the present state of their cultivation, were in favour of the latter; yet, supposing it as good in 1750 as at present, I hesitate not to assert, that if such immense fabrics, encouraged almost exclusively for a century, could create no better husbandry than I met with in France, we may very safely conclude, that manufactures may flourish greatly, without shedding much influence in favour of agriculture. Such is the conclusion which forces itself upon one from the general view of the kingdom; but let us examine it more in detail.—The greatest fabrics in France are the cottons and woollens of Normandie, the woollens of Picardy and Champagne, the linens of Bretagne, and the silks and hardware of the Lyonois. Now, if manufactures be the true encouragement

of agriculture, the vicinity of those great fabrics ought to be the best cultivated districts in the kingdom. I have visited all those manufactures, and remarked the attendant culture, which is unexceptionably so execrable, that one would be much more inclined to think there was something pestiferous to agriculture in the neighbourhood of a manufacture, than to look up to it as a mean of encouragement. Considering the fertility of the soil, which is great, Picardy and Normandie are among the worst cultivated countries I have seen. The immense fabrics of Abbeville and Amiens have not caused the inclosure of a single field, or the banishment of fallows from a single acre. Go from Elbœuf to Rouen, if you would view a desert: and the Pays de Caux, possessing one of the richest soils in the world, with manufactures in every hut and cottage, presents one continued scene of weeds, filth, and beggary; a soil so villainously managed, that if it were not naturally of an inexhaustible fertility, it would long ago have been utterly ruined. The agriculture of Champagne is miserable, even to a proverb; I saw there great and flourishing manufactures, and cultivation in ruins around them. Let us pass into Bretagne, which affords but one spectacle, that of a dreary, desolate waste; dark as ling—*sombre* as broom can make it.—You find yourself in the midst of one of the greatest linen manufactures in Europe, and, throwing your eye around the country, can scarcely believe the inhabitants are fed by agriculture; if they subsisted by the chase of wild animals, their country might be as well cultivated. From hence cross the kingdom to Lyons; all the world knows the immense fabrics found there; and those of St. Etienne among the most flourishing in the kingdom: *De toutes les provinces de France, says M. Roland de la Platière, le Lyonois est le plus miserable* *. What I saw of it gave me little reason to question the assertion. The remark of another French writer makes the experiment double: *L'Artois est un de provinces les plus riches du royaume. C'est un verité incontestable—elle ne possède point de manufactures* †. I will not presume to assert, that the agriculture of certain districts is bad, *because* they abound with manufactures, though I believe it to be very much the case in the Pays de Caux; I merely state the facts, which I clearly know, because they came within my own eye; the fabrics are the greatest in the kingdom, and certainly the agriculture is amongst the worst. In my tour through Ireland, the journal of which is before the public, I examined, with attention, the vast linen manufacture which spreads all over the north of that kingdom. I there found the same spectacle that Bretagne offers; husbandry so miserably, so contemptibly bad, that I have shewn, by calculation, the whole province converted into a sheep-walk, and feeding but two sheep per acre, would yield, in

* *Journal Physique*, tom. xxxvi. p. 342.

† *Memoire sur cette question, Est-il utile en Artois de diviser les fermes*, par M. Delegorgue. 1786. p. 23.

wool only, a greater value than the whole amount of the linen fabric *; a circumstance I attribute entirely to the manufacture spreading into the country, instead of being confined to towns. *Wherever the linen manufacture spreads there tillage is very bad*, said that attentive observer the Lord Chief Baron Forster †.—The Earl of Tyrone has an estate, in the county of Derry, amidst manufactures, and another in that of Waterford, where there are none; and he assured me, that if the Derry land were in Waterford, or absolutely freed from fabrics, he should clear full one-third more money from it ‡.—If we pass into England, we shall find something similar, though not in an equal degree; the manufacturing parts of the kingdom being among the worst cultivated. You must not go for agriculture to Yorkshire, Lancashire, Warwickshire, or Gloucestershire, which are full of fabrics, but to Kent, where there is not the trace of a fabric; to Berkshire, Hertfordshire, and Suffolk, where there are scarcely any; Norwich is an exception, being the only great manufacture in the kingdom in a thoroughly well cultivated district, which must very much be attributed to the fabric being kept remarkably within the city, and spreading (spinning excepted) not much into the country; a circumstance that deserves attention, as it confirms strongly the preceding observations. But the two counties of Kent and Lancaster are expressly to the purpose, because they form a double experiment; Lancaster is the most manufacturing province in England, and amongst the worst cultivated: Kent has not the shadow of a manufacture, and is perhaps the best cultivated. Italy will furnish instances, more to the purpose, than any yet cited. The richest and most flourishing countries in Europe, in proportion to their extent, are probably Piedmont, and the Milanese. All the signs of prosperity are there met with; populousness well employed and well supported; a great export without; a thriving consumption within; magnificent roads; numerous and wealthy towns; circulation active; interest of money low; and the price of labour high. In a word, you can name no circumstance that shall prove Manchester, Birmingham, Rouen, and Lyons to be in a prosperous state, that is found diffused throughout the whole of these countries; to what is all this prosperity to be ascribed? certainly not to manufactures, because they possess hardly the trace of a fabric: there are a few of no consideration at Milan; and there are in Piedmont the silk mills, to give the first hand to that product; but on the whole to an amount so very trifling, that both countries must be considered as *without* fabrics. They are equally without commerce, being excluded from the sea; and though there is a navigable river that passes through both these territories, yet no use is made of it, for there are five sovereigns between Piedmont and its mouth, all of whom lay duties on the transit of every sort of merchandize. As these two countries do not owe their riches to manufactures or com-

* *A Tour in Ireland*, 2d edit. 8vo. vol. ii. p. 304. † *Ib.* vol. i. p. 123. ‡ *Ib.* vol. i. p. 515.
4 D 2 merce,

merce, so undoubtedly they are not indebted for them to any peculiar felicity in their governments; both are despotisms; and the despot * of Milan makes that country a beast of burthen to Germany; the revenues are remitted to Vienna; and the cloaths, even for the troops paid by Milan, come from Germany. The origin and the support of all the wealth of these countries, are to be found in AGRICULTURE ALONE, which is carried to such perfection as to prove, that it is equal to the sole support of a modern and most flourishing society: to keep that society in a state of great wealth; and to enable the governments to be, in proportion to their extent, doubly more powerful than either France or England. Piedmont supports a regal court, and pays 30,000 men. The same extent of country, or number of people, does not effect the half of this in any other dominion of Europe. But are these territories really without manufactures? no: nor is any country in the world; it is not possible to find a people totally exempt from them. The present inquiry demands no such exemption: it is only necessary to shew, that the manufactures found in the Milanese and in Piedmont are such as arise absolutely in consequence of agriculture; that it is agriculture which supports and nourishes them; and that, on the contrary, these manufactures are so far from doing any thing politically for agriculture, that they occasion the exposing of it to restrictions and monopolies; for the government in these countries have been bitten by the same madness of commerce that has infested other kingdoms; and have attempted, by such means, to raise these trifling fabrics into foreign export. Happily they have never been able to do it; for there is reason to imagine, that success would have suggested other restrictions unfavourable to the great foundation of all their prosperity. Thus the instances produced are express to the purpose, as they exhibit two opulent states, supported by agriculture alone, and possessing no other manufactures or commerce, than what every country must possess that enjoys a flourishing cultivation; for it is not to be expected that such great results are to be found attending common exertions only. On the contrary, those that have converted part of these noble territories into a garden, have been great and exemplary. The canals, for mere irrigation, are greater works than many in England for the purposes of navigation; and the infinite attention that is given to the perpetual deviation of the waters, is a spectacle of equal merit and curiosity. Hence the following facts cannot be controverted:

I. That the agriculture of France, after a century of exclusive and successful attention to manufactures, was in a wretched state.

* The expression has nothing too harsh, when applied to the late Emperor, in whose reign I visited the Milanese: it is not applicable to the wise and benignant Leopold, who has given ample grounds to induce a belief, that he will prove a blessing to every country that is happy enough to be governed by him.

II. That

II. That the manufacturing districts in France and England are the worst cultivated.

III. That the best cultivation in England, and some of the best in France, must be looked for where no manufactures are to be found.

IV. That when the fabrics spread into all the cottages of a country, as in France and Ireland, such a circumstance is absolutely destructive of agriculture: spinning only excepted, which is almost universal in every country.

V. That agriculture alone, when thoroughly improved, is equal to the establishment and support of great national wealth, power, and felicity.

And from these facts, the following corollaries are clearly deducible:

I. That the best method of improving agriculture is not by establishing manufactures and commerce, because they may be established in great extent and perfection, and yet agriculture may remain in a miserable state.

II. That the establishment of a flourishing agriculture inevitably occasions the possession of such manufactures and commerce as are equal to the support of numerous and flourishing towns; and to whatever is necessary to form a great and potent society. The lesson to governments is deducible in few words: first, secure prosperity to agriculture, by equal taxation *, and by absolute liberty † of cultivation and sale §. Secondly, do no more to encourage manufactures and commerce than by letting them alone, a policy exclusive of every idea of monopoly. We may safely affirm, and our assertions are founded on unquestionable facts, that any country will attain the utmost prosperity of which its government is capable that steadily pursues this conduct.

C H A P. XX.

Of the Taxation of France.

THE difficulty of understanding the details of the finances of France, induced me to attempt disentangling their confusion, by reducing them to such heads as are common in our own revenue. The particulars indeed are too long to insert, but the subject of taxation is of too much importance to be passed over absolutely in silence.

* There is no equality but in those on consumption, and tythes also incompatible.

† Liberty of cultivation implies an unlimited power of inclosure: the privilege of cultivating any plant the farmer pleases, without shackle or restraint.

‡ An unbounded freedom of export.

Taxes on Land under the old Government.

	French Money.	English Money.
Vingtiemes, - - -	55,565,264 liv.	£. 2,430,980
Taille, - - -	81,000,000	3,543,750
Local impositions, - - -	1,800,000	78,750
Capitation, - - -	22,000,000	962,500
Décimes, - - -	10,600,000	463,750
Sundries, - - -	600,000	26,250
	<hr/> 171,565,264	<hr/> 7,505,980

The calculation of the committee of imposition*, in the National Assembly, is this,

Vingtiemes, - - -	55,565,264 liv.	
Décimes, - - -	10,000,000	
Other impositions, - - -	23,844,016	
Taille, - - -	73,816,179	
Capitation, - - -	6,133,274	
Tythes, - - -	110,000,000	
Half the <i>gabelle</i> , - - -	30,000,000	
Half the excise on leather, - - -	4,500,000	
	<hr/> 314,059,724	Or, £. 13,740,112 sterling.

It is sufficiently evident that this is an inflated account in several articles, as the committee had some design in view. Upon the principles of the œconomistes, they proposed a land-tax of three hundred millions for the service of the year 1791; and that proposition was made under the assertion that the nation paid a preater land-tax under the old government. The reasoning, however, is erroneous; and to direct 110,000,000, the amount of tythes (which the Assembly had expressly abolished without condition), to be made good by a land-tax, is an oppression for no better reason than its having existed before: to bring salt and leather into the account is another exaggeration; why not include the duties on wine, by parity of reasoning? A farmer who has no vineyard of his own must buy it, and he cannot buy without paying *aides*; but are those taxes therefore to be reckoned? Certainly not; nor any others on consumption, which are clearly in a different class, and not to be included in such a detail.

* *Raport du Comité de l'imposition. Pièces Just. No. 1.*

Taxes on Consumption.

	French Money.	English Money.
Salt, - - -	58,560,000 liv.	£. 2,562,000
Wine and brandy, &c. - -	56,250,181	2,460,444
Tobacco, - - -	27,000,000	1,181,205
Leather, - - -	5,850,008	25,5937
Paper and cards, - - -	1,081,509	47,315
Starch and powder, - -	758,049	33,164
Iron, - - -	980,000	42,875
Oil, - - -	763,000	33,381
Glass, - - -	150,000	6,562
Soap, - - -	838,971	36,704
Linen and stuffs, - - -	150,000	6,562
Octrois, Entrées, &c. - -	57,561,552	2,518,317
Cattle, - - -	630,000	27,562
Customs, - - -	23,440,000	1,025,500
Tolls, - - -	5,000,000	218,750
Stamps, - - -	20,244,473	885,695
Local duties, - - -	1,133,162	49,575
	<hr/> 260,390,905	<hr/> 11,391,548

It merits the reader's attention, that of this long list nothing is retained under the new government but the customs and stamps.

General Revenue.

	French Money	English Money.
Taxes on land, - - -	171,565,264 liv.	£. 7,505,980
Domaines, - - -	9,900,000	433,125
Consumption, - - -	260,390,905	11,391,548
Personal, - - -	44,240,000	1,935,500
Monopolies, - - -	28,513,774	1,247,496
Sundries, including the Pays d'Etat, - -	12,580,000	550,375
Taxes not received on account of government, - - -	95,900,000	4,195,625
	<hr/> 622,999,943	<hr/> 22,184,649
Collection, - - -	57,665,000	2,522,843
	<hr/> 680,664,943	<hr/> 24,707,492

Such was the revenue, at the entire command of Louis XVI. And such were the consequences of the funding system, that it had power to strike a paltry into the receipt of so enormous an income, even in the hands of the master of 250,000 bayonets, and twenty-five millions of subjects. Sovereigns ought to contemplate these effects of that PUBLIC CREDIT, upon which the banking, money-

money-changing, and stock-broking writers, with Necker at their head, have delivered such panegyrics ! A system that never entered a country, but to destroy or to annihilate prosperity : it has spread ruin or debility in Spain, Holland, Genoa, Venice, and France : it threatens speedily the extinction of the power, and the overthrow of the constitution of England : it has weakened and almost destroyed Europe, except one country, saved by the splendid talents of a single sovereign. It is impossible to contemplate such a revenue and population, united with variety of natural advantages possessed by France, without blessing the goodness of providence, that a prince like Frederic II. did not fill the throne of Louis XV. Such a penetrating mind would have seen, in perspective, the mischiefs of public credit in France, as clearly as he did in Prussia ; he would have strangled the monster for ever, and would have thereby established a power irresistible by all his neighbours ; and the nations of Europe would have lain in ruins around him.

Changes in the Revenue, occasioned by the Revolution.

The general statement, by the first minister of the finances, from the first May, 1789, to April 30, 1790, compared with the receipt for 1788, will give the defalcation that has taken place, and the additions that are carried to account.

	1789.	1790.
1. Fermes générales, -	150,107,000 liv.	126,895,086 liv.
2. Régie générale des aides, -	50,220,000	31,501,988
3. Régie des domaines, -	50,000,000	49,644,573
4. Ferme des postes, -	12,000,000	10,958,754
5. Ferme des messageries, -	1,100,000	661,162
6. Ferme de Sceau & Poissy, -	630,000	780,000
7. Ferme des affinages, -	120,000	
8. Abonnement de la Flandre -	823,000	822,219
9. Loterie, -	14,000,000	12,710,855
10. Revenus casuels, -	3,000,000	1,157,447
11. Marc d'or, -	1,500,000	760,889
12. Saltpetre, -	8,000,000	303,184
13. Recette générale, -	157,035,890	27,238,524
14. Pays d'États, -	24,556,000	23,848,261
15. Capitations & vingtièmes abonnées	575,000	1,213,505
16. Impositions aux fortifications, -	575,000	676,399
17. Benefice des monnoies, -	500,000	824,301
18. Droits attribués à la caisse du commerce,	636,355	305,418
19. Forges royales, -	80,000	401,702
20. Interets, l'Amerique, -	1,600,000	
21. Debets des comptables, -		2,291,860
Carried forward -	469,858,245	292,996,127
		22. Parties

TAXATION.

577

	1789.	1790.
Brought forward,	469,858,245 liv.	292,996,127 liv.
22. Parties non réclamées a l'hotel de Ville,	—	240,262
23. Petits recouvrements,	—	—
24. Quinze vingt,	180,000	257,000
	460,038,245	293,493,389
25. Plate carried to the mint,	—	14,256,040
26. Dons patriotiques,	—	361,587
27. Contribution patriotique*,	—	9,721,085
		317,832,101

The vast defalcation is, therefore, 176,544,856 liv. (7,723,837l.) the sum which 1790 falls short of 1789.

1791.—The Committee of Imposts have calculated the sums wanted for the year 1791, and they proposed to raise them in the following manner † :

Land-tax (<i>contribution fonciere</i>),	287,000,000 liv.
Tax on personal property (<i>contribution mobiliare</i>),	60,000,000
Stamps (<i>droit d'enregistrement</i>),	50,246,478
Other stamps,	20,764,800
Patents (stamps),	20,182,000
Lotteries,	10,000,000
Customs,	20,700,000
Powder, saltpetre, marc d'or, and affinages,	1,000,000
Mortgages,	5,375,000
Posts and stage-coaches,	12,000,000
Contribution patriotique,	34,562,000
Domaines,	15,000,000
Salt works,	3,000,000
Interest from Americans, &c.	4,000,000
Sale of salt and tobacco in the warehouses of the farmers general,	29,169,462
	573,000,000 Or, £.25,068,750

It appears, by the *Memoires présentés a l'Assemblée Nationale au nom du Com. des Finances, par M. de Montesquiou*, September 9, 1791. 4to. that the revenue in 1790 produced only 253,091,000 liv. which was made up by anticipations and assignats.

* It deserves attention, that this *contribution patriotique* is mentioned as a resource of 35,000,000 liv. for the year 1791, by the committee of imposition. *Rapport 6 Decembre, 1790, sur les moyens de pouvoir aux dépenses pour 1791*, p. 5.

† *Rapport fait le 6 Decembre, 1790. 8vo. p. 6. Rapport fait le 19 February, 1791. 8vo. p. 7.*
4 E Interest

Interest of Debts.

The extreme variation of statement that these exhibit, may prove to us how exceedingly difficult it is to gain any clear and precise idea of French finances, for these estimations of interest do not proceed from equal variations in fact, but more from the modes in which accounts are drawn up; anticipations vary considerably, and *remboursemens* are sometimes paid and sometimes not. It will however be proper to enquire into the amount of the debt, according to the latest statements. The following is the account of the committee of finances :

	Capitals.	Interest.
<i>Rents viagères</i> (life annuities), -	1,018,233,460 liv.	101,823,846 liv.
<i>Rentes perpétuelles</i> .— <i>Rentes constituées</i> ,	94,912,340	4,745,617
<i>Rentes payées à l'hôtel de ville</i> , -	2,422,987,301	52,735,856
<i>Dettes liquidées</i> , -	12,351,643	544,114
<i>Gages & traitemens</i> ,	2,603,210	93,645
<i>Communantes</i> , -	3,066,240	153,312
<i>Indemnités</i> , -	27,306,840	1,365,342
<i>Emprunts, Pays d'Etats</i> ,	126,964,734	6,276,087
	<hr/>	<hr/>
	*3,708,430,768	167,737,819
<i>Dette exigible</i> , -	†1,878,816,534	92,133,239
	<hr/>	<hr/>
	‡5,587,247,302	259,871,058
	<hr/>	<hr/>
Or sterling, -	£.244,442,099	£.11,369,357

The sum total of these interests, however, do not agree with those above-mentioned under the year 1790, of 371,306,938 liv. which seems to be owing to many *remoursemens* of that year, for sums very lately advanced on the plate carried to the mint on the *don patriotique*, and on various other receipts. I must again remark, that clear accounts are not to be looked for in the complex mountain of French finances.

* The Committee state, that this debt, by leaving the annuities to extinguish themselves, and by buying in the perpetual funds, at twenty years purchase, the whole would be extinguished with the sum of 1,321,191,817 liv. *Etat de la Dette Publique*. 4to. 1790. p. 8.

† Monf. de Montesquiou, in the memoir presented September 9, 1791, makes the *dettes exigibles* amount to 2,300,000,000 liv. p. 58. He makes the whole debt 3,400,000,000 liv. to which add 1,800,000,000 of assignats, and this is 5,200,000,000 liv.; but 215,000,000 liv. of assignats have been burnt. p. 46.

‡ I have read Monf. Arnould (*De la Balance du Commerce*, 1791), who makes the debt 4,152,000,000 liv.; but not giving his authorities satisfactorily, I must adhere to the above-mentioned statement.

Assignats

Assignats to the amount of 400,000,000 had then been issued; but the committee does not include them in the preceding account.

Since the above was written I have received the *Apperçu des Recettes & Dépenses de l'Année*, 1791, by the finance minister, M. Dufresne, gives the account of the expences necessary to be incurred in 1791, according to the decrees of the assembly, and they are as follows:

To the ecclesiastics, for the expence of public worship,	70,000,000 liv.
Pensions to the religious of the convents and monasteries suppressed,	70,000,000
Justice,	12,000,000
Directories of departments and districts,	9,360,000
Civil list, pensions, salaries, bureaux, academies, &c.	67,041,363
All other payments, of which interest of debts,	192,265,000
Paris,	9,323,800
War department and marine,	134,432
	<hr/> 360,770,500
	<hr/> 589,172,000 Or, £.25,776,274

To procure an account equally clear of the real receipts for 1790, would be a more interesting object, for this end I consulted *Etat des Recettes et Dépenses pendant l'Année*, 1790, 4to. 1791, but it is in vain, the receipts are no longer thrown into such a form as to permit a clear distinction between the product of taxes and the receipt, by funding and assignats; the receipt is given in two divisions; first, for the four first months of the year; and secondly, for the eight last; and the heads in the two accounts not being the same, to calculate them would be attended with very little certainty.

By the *Memoires sur les Finances présentés*, 9th September, 1791, 4to. some points receive more light than in any preceding account. It appears, that the national estates sold have produced 964,733,114 liv.; this is a curious fact; but the *idea*, that the remainder will produce enough to make this sum up 3,500,090,000 liv. is by no means certain; indeed, it is of a complexion too dubious to be admitted; and of those actually sold, the receipt only to the amount of 735,054,754 liv. is positively ascertained: and this vast sum, in the whole probably not less than 40 millions sterling, must, without doubt, contribute very greatly, even beyond all calculation, to give security to the new government, as it interests the most closely an immense number of persons, with all their connections and dependencies, to support that system, by which alone this great property can be rendered safe. If to this be added the whole *Tiers Etat* of the

kingdom, that is 90 in 100 of the total, it must be apparent, that the hopes of a counter-revolution must rest on external force, inadequate to the conquest of such a kingdom as France, unless all possible advantages towards favouring the attempt be united and aided by a well connected insurrection of those who are discontented.

	liv.
The Assembly decreed, that the general expence of the year should be,	584,700,000
And for the departments,	56,300,000
	<hr/>
Total,	641,000,000
Of which the <i>Caisse del Extraordinaire</i> was to furnish in lieu of domaines received,	60,000,000
	<hr/>
	581,000,000
Deduct expence of receipt of 56,300,000 included,	8,000,000
	<hr/>
Wanting by taxes,	573,000,000
But the expence of collection and management adds a further burthen to the people of	26,292,500

I have drawn up this budget as nearly to the truth as I can, from the three reports of the Committee of Imposts, of Dec. 6, 1790, Feb. 19, and March 15, 1791, which reports are not free from confusion, owing to decrees of the Assembly, which were changeable and various. The *entrées* were positively voted for 25 millions, and the vote scarcely passed, when the Fauxbourg St. Antoine voted their abolition; and it was no question, who was to be obeyed, the National Assembly of France, or the Fauxbourgs of Paris. The Assembly instantly gave way and abolished the *entrées*. Other duties also varied much from changeable votes, so that there is a necessary disagreement between the three reports in almost every article, but in this account I have guided myself by the sums last proposed.

Of the Funding System.

It appears, from the preceding accounts, that France, under the old government, pursued the ruinous system of mortgaging its revenues, as regularly as any other country, whose greater freedom might be supposed to offer more temptations to the practice. This system, however, almost unaided by any other cause, has overturned that government, by means of the most extraordinary revolution upon record. If Louis XIV. amidst the splendour of his reign and career of his conquests, could possibly have foreseen that the second sovereign in descent from him would be led captive by his subjects, on account of the debts he was then contracting, he would either have rejected with horror the system he adopted, or have manifested the most entire want of those feelings which ought

ought to dwell in the breast of a great and ambitious monarch. But, after this memorable example to other countries, it remains a subject of infinite curiosity, to see how far the infatuated and blind spirit of funding will now be pursued. Every hour, after the great event in France, will make it more and more critical, and will inevitably involve in its train new revolutions, perhaps of a complexion more dangerous to established families, than any thing we have seen in France.— If peace is preserved in that kingdom, the debt will extinguish itself, being in a great proportion annuities for lives; but were not this the case, and should new wars add to the national burthens, the people, almost emancipated as they have been from taxation, will be brought back to it with great difficulty; and other assemblies, feeling their power better established, will not pay the same attention to the public creditors which the present has done; and the event might be similar to what will happen in England. No government will ever think of committing a deliberate act of bankruptcy; but when taxes are pushed to such a height that the people will no longer pay them, they are ripe for sedition; presently feel their own power;—and the event may be easily conjectured. What is the conclusion that follows?—That the funding system, or rather the wars which occasion it, are so fatal and pestilential, that, at all events, they ought to be avoided; but that, if unhappily they cannot, they should be supported by annual taxes (never by loans), which implies a war of defence *at home*; a renunciation of all exterior dominion; and the absolute annihilation of that commercial system of policy on which conquests, colonies, and debts have been so fatally erected.

Of the amount of Specie in France.

The writings of Monsr. Necker will assist in the register of the French mint, which proves satisfactorily the quantity of money coined in France; it must, however, be sufficiently obvious, that from this quantity it is mere conjecture to attempt to ascertain, at any period, the actual quantity of specie remaining in the kingdom.

Coined in France from 1726 to 1780.—		Gold,	-	957,200,000 liv.
		Silver,	-	1,489,500,000
				<hr/>
				2,446,700,000
In 1781, 82, and 83,			-	52,300,000
				<hr/>
				2,500,000,000
				<hr/>
And existing in 1784,			-	2,200,000,000

And

And he makes the increase of specie, in 15 years, from 1763 to 1777, in France, equal to the increase of all the rest of Europe. From the inquiries of M. Clavière* and M. Arnould†, it appears, that the gold and silver currency of France, at the assembly of the States, was two milliards (87,500,000l.). Whatever authority Mons. Necker placed in the supposed balance of the French trade, of above three millions sterling per annum, was assumed on very insufficient grounds. The Marquis de Castaux has proved the facts, which Mons. Necker deduced from that balance, to have never existed but in his own imagination‡. The importance also, which, in the 10th chapter of the same book, that writer assigns to the possession of great quantities of gold and silver; the political conduct he expressly recommends to procure those metals, as selling much merchandize to other nations, and buying little; studying to effect this by shackling trade with duties upon export and import; and by the acquisition of colonies: the whole of this system betrays no inconsiderable degree of littleness; it is worthy of the counting-house alone; and manifests none of the views of a great statesman, nor even the abilities of an able politician: one is sure to meet, in Mons. Necker's productions, with an eloquent display of narrow ideas, and never the great reach of real talents, nor the masterly views of decisive genius. His ministry, and his publications, shew the equable orderly arrangement of a mind well regulated for little pursuits; but lost amidst the great events of a new system, bursting into efficiency amidst the whirlwind of a revolution.

The total currency, of both gold and silver, in Great Britain, may probably not be less than 40 millions sterling. But no comparison can be made between the two kingdoms, because the great mass of England's circulating currency is in paper; whereas, in France, all, or nearly all, was in coin, till assignats were issued. It is probably a just observation of Mr. Hume, that the circulation of paper tends strongly to banish coin. Every kingdom must have, proportioned to its industry, a circulation of something; and if it have no paper, that circulation, so proportioned to its industry, will be in coin; the creation of so much paper supplies the place of it; and consequently keeps it from flowing into any country, where it is demanded by the offer of valuable equivalents. But, on the other hand, it has been urged, that paper, supplying the circulation as well and more conveniently than the metals, allows the latter to be sent profitably

* *Opinion d'un Créancier de l'Etat.*

† *De la Bal. du Com.* tom. ii, p. 206.

‡ Mons. de Calonne's recoinage, of 1785, has proved, that Mons. Necker, even upon a subject more peculiarly his own, as a banker, is not so correct as one would imagine, when he ventures either to calculate or to conjecture. It is with difficulty he allows 300 millions for the export and melting of louis', which appear to have been 650,000,000liv. He states the gold coinage (including the silver of the years 1781, 82, and 83), at 1,009,500,000liv. instead of which, it was, by Mons. de Calonne's account, 1,300,000,000liv.

out of the kingdom, not to be lost, but beneficially as merchandize, and that an annual benefit is made by this, as well as by all other trades. If this argument be good, and in all probability there is some truth in it, France, by keeping so enormous a capital at home as 90 millions sterling, to answer purposes which, in England, are fulfilled with less than half, by means of paper, loses the profit which might be made on 45 millions, were that sum employed as it is employed in England. There is yet another explanation of the great paper currency of England, which has also much truth in it, and especially in the present moment. It may be said, that paper has been so largely coined in England, because the balance of its transactions with foreigners has not brought in the metals as fast as its industry has demanded a circulating representative; its industry has increased faster than its money; and I believe this to have been very much the case since the American war, in which period the progress of prosperity, in this kingdom, has been of an unexampled rapidity. In such a circumstance, the circulation of paper, instead of lessening the quantity of specie, will increase it, by facilitating the operations of commerce. Another evil, of a worse tendency, perhaps, is the disposition to hoard, when the currency is all in the precious metals. *Monf. Necker* states, as an undoubted fact, that vast sums of gold are hoarded in France; and circumstances came to light on *Monf. de Calonne's* recoinage, which proved the same fact. The ordinary circulation of Paris does not exceed from 80 to 100,000,000 liv. as we learn from the same minister*; a fact which also unites with the immensity of the total specie of France, to shew that perhaps the great mass of it is hoarded. It must be sufficiently obvious, that this practice depends much on a want of confidence in the government, and on the erroneous conduct of not encouraging investments in the national industry: but it tends strongly to give France a greater mass of the precious metals than is demanded by her industry.

Two considerable proofs exist in Europe, that a country will always attract such a share of the precious metals as is proportioned to its industry, if not prevented by circulating paper. These are Prussia and Modena. The King of Prussia's treasure, calculated as it is at 15 millions sterling, is thrice as much as the whole circulating specie of his dominions. In all probability, had that treasure not been withdrawn from circulation, the specie would not at this moment have been one dollar greater than it is at present; and for this plain reason, that there appears no want of currency in those dominions; the degree of industry there demanding specie from all its neighbours, has acquired it as fast as the King has accumulated his treasure, but had no treasure been formed, the same demand would not have taken place, and consequently no such influx of money. Modena, as I once before observed, in proportion to its extent and riches, affords

* *De l'Etat de la France*, p. 80.

a similar instance ; yet the duke's hoard is supposed, on pretty good grounds, to exceed very much all the circulating specie of his duchy ; and I made particular inquiries at Modena, whether a want of it were perceptible ? I was assured of the contrary, and that their currency was fully equal to the demands of their industry and money-exchanges. From these instances, we may, without hesitation, pronounce, that the specie of England is kept vastly below its natural measure, by the immensity of our paper circulation. There is little importance in possessing great quantities of specie, if not in a national hoard : the case of England nearly permits us to question it altogether. For neither in the domestic circulation, nor in foreign transactions, has France been able to effect any thing by means of her money, which we have not been able to command equally well, perhaps better, with our paper. A wise government should therefore be solicitous for the industrious and productive employment of her people ; if she secure that essential point, she may safely leave the metals to find their own level, without paying any regard whether her circulation be in paper or in gold. Nor is there danger of paper being too much multiplied, as long as the acceptance of it is voluntary ; for it would not be multiplied, if it were not demanded ; and if it be demanded, it ought to be multiplied. With paper, forced by government on the people, the case is far different : from the circumstance of its being *forced* there is the clearest proof that it is not *demanded*, and consequently ought not to be issued : force, in such a case, is fraud ; and a public fraud ought never to be practised, but in the last extremity of distress. The assignats issued by the National Assembly, are of this complexion ; the step, however dangerous, might possibly be necessary to secure the new constitution ; but I shall not hesitate a moment in declaring, that an avowed bankruptcy would, in other respects, have been a much wiser measure, and attended probably with fewer and less evils.—Of thirty-four commercial cities, that presented addresses upon the project of assignats, seven only were for them*. The scheme met with equal opposition from rank†, literature‡, and commerce§. The prognostics, however, of an enormous discount, were not verified so much as might have been expected.—M. Decretot, in September 1790, mentions them with 400 millions only in circulation, being at 10 per cent. discount at Bourdeaux ; and M. de Condorcet 6 per cent. at Paris ; thence they both concluded, that the discount would be enormous, if a greater issue of them took place ; yet, in May 1791, after many hundred millions more had been issued, they were only at from 7 to 10 per cent. discount§. And another circumstance equally mistaken, was the expectation

* *De l'Etat de la France*, par M. de Calonne. 8vo. 1790. p. 82. † *Opinion de M. de la Rochefoucauld, sur l'Assignats monnoi.* 8vo. ‡ *Sur la Proposition d'acquitter les dettes en Assignats*, par M. Condorcet. 8vo. p. 14. § *Opinion de M. Decretot sur l'Assignats.* 8vo. p. 8.

§ It became greater since ; but owing to foreign causes.

of an enormous rise of all common prices—which did not happen, for corn rather fell in its value; a remarkable experiment, that deserves to be remembered. The Marquis de Condorcet supposed, that wheat would rise from 24 to 36 liv. the septier, perhaps in one day*. The assignats amounted, on the dissolution of the first Assembly, to 1800,000,000 liv.

What constitutes the Merit of a Tax.

Many writings have appeared of late in France, on the subject of taxation, and many speeches have been delivered in the National Assembly concerning the principles that ought to govern the statesmen who possess the power of deciding in questions of such importance. It is much to be regretted, that the members, who have made the greatest figure in that assembly, have, in these inquiries, rather adopted the opinions of a certain class of philosophers, who made a considerable noise in France 20 or 30 years ago, than taken the pains seriously to inform themselves well of the facts that ought to be examined upon the subject. It is not for a traveller to go to the bottom of such intricate inquiries, which would demand long details, and a very minute examination; but the question is, in the present moment, of such importance to France, that a rapid *coup d'œil* cannot but have its use. The following circumstances are those which I conceive form all the merit of taxation:

1. Equality.
2. Facility of payment.
3. Encouragement of industry.
4. Ease of collection.
5. Difficulty of too great extension.

The first essential point is equality. It is absolutely necessary, that every individual in the society contribute to the wants of the state, in proportion to his ability, provided such contribution does not impede the progress of his industry†.

Every

* *Sur la Proposition d'acquitter les dettes en Assignats*, par M. Condorcet, p. 21.

† Some little obscurity, that hangs over this definition, should be removed; by *ability*, must not be understood either capital or income, but that superlucration, as Davenant called it, which melts in consumption: suppose a manufacturer makes a profit of 2000l. a-year, *living* upon 500l. and annually investing 1500l. in his business, it is sufficiently obvious, upon just principles, that the state cannot lay the 1500l. under contribution by taxes. The 500l. is the only income exposed; but when the manufacturer dies, and his son turns gentleman, the whole income is made to contribute. It must be obvious, however, that excises on a manufacturer's fabric are not taxes *on him*, but on the idle consumer, for he draws them completely back. In like manner, if a landlord farm his own estate, and expend the income in improvements, living on but a small portion of the profit, it is sufficiently clear,

Every writer, and every opinion upon the subject agree in this; but the difficulty is, how to ascertain the ability. Taxes on property, and taxes on consumption, seem to have this merit; they will, however, be found to vary prodigiously; for long experience, in all countries, has proved the infinite difficulty of ascertaining property, and the tyranny that is necessary to be practised, in order to be tolerably exact. For this reason, all land-taxes, under an appearance of equality, are cruelly unequal: if levied on the gross produce *in kind*, they are ten times heavier on poor land than on rich; and the value taken by the state, bears no proportion to the expence which effected the production. If levied on the rent, the ease of frauds makes them universal and perpetual; and if, to avoid these, the leases are registered and taxed, this prevents leases, and destroys agriculture. If lands are valued by a *cadaastre*, the expence is enormous*, and the merit is gone in a few years, by variations impossible to correct; till at last the only merit of the tax is its *inequality*, which is now the case in the Milanese, Piedmont, Savoy, and England; where an attempt to make the land-taxes equal would ruin the husbandry, and produce infinite oppression. Land taxes, so far from being equal, are so much the reverse, that it is the *nominal*, and not the *real* property, that bears the tax; for mortgages escape though amounting to three-fourths of the property; and if, to avoid this cruelty, the proprietor be allowed, as in the case of the *vingtiemes* in France, to tax the mortgagee, either the regulation is evaded by private agreements, or money is no longer lent for the most useful of all purposes. Lastly, land is visible, and cannot be concealed; whereas fortunes in money are invisible, and will ever slip away from taxation of every kind, except from those on consumption. Thus land taxes, viewed in what light soever, are totally unequal, oppressive, and ruinous. On the contrary, taxes

that taxes ought not to affect one shilling of his expenditure on his land; they can reach, with propriety, the expences of his living only; if they touch any other part of his expenditure, they deprive him of those tools that are working the business of the state. A man paying, therefore, *according to his ability*, must be understood in a restrained sense. The preposterous nature of land-taxes is seen in this distinction, that an idle worthless dissipator is taxed exactly in the same degree as his industrious neighbour, who is converting a desert into a garden.

* Yet the nobility of Lyons and Artois, and the tiers of Troyes, demand a general *cadaastre* of all France, *Cabier*. p. 17.—*Artois*, p. 18.—*Troyes*, p. 7.—The committee of imposition recommends one also, *Rapport*, p. 8.—To make the *cadaastre* of Limosin cost 2,592,000 liv. (113,355l. 15s.) and the whole kingdom would cost, at the same rate, 82,944,000 liv. (3,628,800l.) requiring the employment of 3072 engineers during 18 years, *Essai d'un Methode générale a étendre les connoissances des Voyageurs*, par Monsr. Meunier. 1779. 8vo. tom. i. p. 199.—The King of Sardinia's *cadaastre* is said to have cost 8s. the arpent, *Administration Prov. Le Trône*. tom. ii. p. 236. The *cabiers* demand a *cadaastre* in the language of the *œconomistes*, as if it were to be done as soon as imagined, and to cost only a trifle: and this operation, which would take eighteen years to execute, is advised by M. le Trône to be repeated every nine!

upon

upon consumption are, of all others, the most equal, and the most fair; for they are studiously and correctly proportioned to the quantity of every man's consumption*, which may with truth generally be supposed to be commensurate to his income; at least it may be asserted safely, that there is no other method, equally sure of estimating income, as by that of consumption. There are, it is true, misers who possess much, and consume little; but it is utterly impossible to reach such men in taxation, without tyranny: nor is it of much consequence, for a succession of misers is not to be expected,—and the more the father saved, the more the son consumes; so that upon the revolution of a given period, the thing balances itself, and the state loses nothing. But there is also the greatest justice in the equality of these taxes: for they measure themselves by a man's voluntary expences; if he spend his income advantageously to the national industry and improvement, he pays very light, or no taxes; but if he consume largely and luxuriously, his contribution to the state rises with his expences; advantages possessed by no other species of tax. Equality reigns so completely in these taxes, that from the poor man, who, consuming nothing, pays nothing; to the next class, which, consuming little, pays little; and to the most wealthy, which, consuming much, pays much, all is regulated on the most perfect scale of contribution. It is needless to observe, that excises and customs equally possess this advantage; that stamps have the same, and even greater; and that *entrées* and *octrois* have a like merit, so far as cities are concerned, but are inferior in not being equally laid on all persons, wherever they may reside: a benefit in the eyes of those who think towns an evil. It must be sufficiently obvious, that all personal taxes are, to the highest degree unequal, from the impossibility of varying them properly with the conditions of life: monopolies are equal or not, in proportion to the whole society being equally subjected to them; the post-office is one of the best of taxes, and the most equal.

2. *Facility of payment.*—In this great point, there is only one sort of tax which has real merit, namely, that on consumption. Here the tax is blended with the

* The objection of the committee of imposts, that the product of such taxes is uncertain, is one of the surest proofs of their merit. Would you have a certain tax from an uncertain income? To demand it is tyranny, *Rapport du Comité de l'Imposition concernant les Loix Constitutionnelles des Finances*, 20th December, 1790. 8vo. p. 19. I know of no objections to taxes on consumption, that do not bear in a greater degree on those upon property. It is said, that excises raise the prices of manufactures, and impede foreign trade and domestic consumption, which has certainly truth in it; but it is also true, that England is, in spite of them, the most manufacturing and commercial nation upon earth, even with many very bad excises, and which ought to be changed; they are said to affect the consumption of the poor particularly, which is merely objecting to the *abuse*, and not to the nature of the tax; certainly the *height* to which taxation of every kind is carried in England, is cruel, shameful, and tyrannical. Moderate excises, properly laid, would have no other ill effects than such as flow of necessity from the nature of all taxation; as to *immoderate* taxes, and *improperly* laid, they must be mischievous, whether on property or on consumption.

price of the commodity, and the consumer pays without knowing it. He knows the price of a bottle of wine or brandy, a pack of cards, a coach-wheel, a pound of candles, tea, snuff, or salt—and he buys as he can afford; it is the same to him, whether the sum he pays be the original expence of production, the dealer's profit, or the national tax; he has nothing to do with calculating them separately, and pays them blended in the price. His ease of paying the tax is great also, by the time of demanding it, which is just at the moment when he may be thought disposed to consume, because he can afford it, which is certainly the case *with the great mass* of mankind. Taxes on property, and especially on land, are much inferior in this respect. So far as they are advanced by the tenant, and drawn back when he reckons with the landlord, they are easy to the latter: but they are exactly, in the same proportion, burthensome to the tenant, who has to advance, out of his own pocket, another man's tax, which is palpably unjust. We do not feel this much in England, because the tenantry are commonly rich enough not to regard it; but in other countries, where they are poor, it is a great oppression. At the time also of demanding the tax from the landlord, who farms his own estate, his ease is never consulted; he has to pay the tax, not because he has sold his produce, for he must pay, though his land should not produce a single farthing; not because he buys, and thereby shews that he can afford it, but merely because he possesses, which by no means proves an ability to pay at all: nay, he pays without possessing more than the name, while another receives the profit; all which shews, that land-taxes are grossly deficient in this essential requisite. It is fair, however, to admit, that a land-tax, paid in kind, like tythes gathered, are easy of payment; enormous as other objections are to them, in this respect they have merit. But no state, in modern ages, can take taxes in kind; and if let, and consequently made an engine of private and personal pique or resentment, they become one of the most horrible and detestable oppressions, fit to be endured by slaves only. Personal taxes are as bad; a man's having a head, or being born to a title, is no proof that he is able to pay a tax, which is demanded of him, at a time that marks neither receipt nor payment.

3. *Encouragement of industry.*—Taxes may be laid in such a manner as to discourage and oppress industry, or, on the contrary, to be in this respect harmless; and under this head, is to be included the investment of capital. If any branch of national industry be overloaded with duties, the profits arising from it will be so much lessened, that men will not invest their capitals in employments thus injuriously treated. The first object to be considered is, what branch of human exertions and industry is nationally most beneficial? The writers and statesmen* of all nations (how much soever they blunder practically), are theoretically agreed upon this point. There is no question, that agriculture is, of all other employments, the most important; and a country will be prosperous,

* Except Colbert, Monf. Necker, and Mr. Pitt.

in proportion to the capitals invested in that pursuit. This decides the merit of land-taxes; in the degree they take place, the profit of possessing land is diminished, and consequently capitals are banished. If a land-tax be equally assessed, a man's improvements are taxed, which he will calculate before he lays out his money, and never invest it in a manner that lays him directly open to the operation of such duties. Thus the lands of such a country will be in the hands of men who have no other capital; and experience uniformly tells us, how important it is to the welfare of agriculture, to have land in rich hands. Taxes upon consumption, may be made utterly destructive of any branch of industry by injudicious methods of laying them; or by carrying them to too great a height; but in this case, the duty fails so much in its produce, that the government suffers as much as the employment. The tax upon leather, in France, was ruinous; the same tax in England is levied without difficulty. The inconvenience of excises chiefly flows from the necessity of larger capitals being in the hands of manufacturers, to enable them, not to *pay*, but to *advance* the tax, which they draw back in the price of the commodity; the real payment being thus thrown, as it always ought to be, on the consumer. This circumstance gives a vast superiority to taxes on consumption, over those on land. The industrious man, who invests his capital in land, cannot draw back his taxes by raising the price of his cattle and corn, and thus make the consumers pay them; it is sufficiently evident, that this is impossible, whereas all taxes on consumption are completely drawn back in the price of the goods; unless the merchant or manufacturer consumes himself, in which case he pays, as he ought to do, the tax. Personal taxes, with respect to the not discouraging of industry, and the investment of capital, are very imperfect; and monopolies (except the post-office), absolutely ruinous, for they are prohibitions on every sort of industry which the state chuses to reserve to itself. The coinage is mischievous or not, in proportion to its fidelity.

4. *Ease of collection.*—In this respect, land and house-taxes have a manifest and clear superiority; for the property is impossible to be concealed,—and the collection is as cheap as it is easy; and this small merit (of most trifling import compared with the magnitude of the evils that attend them) has been the motive for recurring to them so much in every country. Excises and customs are difficult and expensive to levy. Stamps, however, have great merit; in the British revenue, 1,329,905*l.* is raised at the expence of 51,691*l.* Personal taxes are cheaply collected, which is their only merit: monopolies are every where expensive—a fresh reason for rejecting them.

5. *Difficulty of too great extension.*—There is some merit in a tax rectifying its own excess, which is the case with those on consumption; for if they be carried to an extreme, they fall off in their produce, by encouraging smuggling and fraud.

fraud. But those on property cannot be evaded, and therefore may be extended to a most oppressive and ruinous excess. The general corollary to be drawn on this subject is this—that the best taxes are those on consumption; and the worst those on property.

On the Proposition of the Oeconomistes for an Union of all Taxes on Land.

If the preceding ideas have any thing of truth in them, this system must be grossly false and mischievous. I know not whether Mr. Locke were the original father of the doctrine, that all taxes, laid in any manner whatsoever, fall ultimately on land; but whoever started or supported it, contributed towards the establishment of one of the most dangerous absurdities that ever disgraced common sense. To enter largely into a refutation of the maxim would be useless, as Sir James Stuart, in his *Principles of Political Oeconomy*, has, with great force of reasoning, laid it in the dust. It was upon this false and vicious theory that the œconomistes proposed to absorb all the imposts of France in a single land-tax. Grant the erroneous datum, that every tax whatever, on consumption or otherwise, is really borne by the land, and their conclusion is just, that it would be better and cheaper to lay on the imposition directly, in the first instance, than indirectly and circuitously: but the original idea being absolutely mistaken, the conclusion falls of course. “Mais que prétendez vous donc obtenir par cette régie si menaçante & si dispendieuse? *De l'argent*. Et surquoi prenez-vous cet argent? *Sur des productions*. Et d'où viennent ces productions? *De la terre*. Allez donc plutôt puiser à la source, & demandez un partage régulier, fixe & proportionnel du produit net du territoire*.” What a series of gross errors is found in this short passage; almost as many as there are words. The contrary is the fact; for these taxes are *not* raised on productions; and these objects do *not* arise from the land; and by laying land-taxes you do *not* dig at the source, unless you could impose land-taxes in foreign countries as well as your own. What trifling is it to repeat, again and again, the same jargon of ideas, without saying one word of the powerful refutation which the above-noted British writer has poured on the whole system? Let the National Assembly lay twenty-seven *vingtièmes* in a varying land-tax, and then let the ruined kingdom come to these visionaries for the balm of their *nouvelle science*, their *physiocratie*, and their *tableau œconomique*! The Noblesse of Guienne give it as their opinion, that an impost *en nature sur les fruits*, that is to say, a tythe, is the best tax†. The clergy of Chalons ask the same thing, and that it may absorb all others‡; but the nobility of the same place declare expressly against

* *Le Trône*, tom. i. p. 323.

† *Cahier de la Noblesse de Guienne*, p. 20.

‡ *Cahier du Clerge de Chalons sur Marne*. p. 11.

it*. The Abbé Raynal, with all his ingenuity, falls into the common error†, and calls a cadastre *une belle institution*. Mons. de Mirabeau‡ has entered at large into a defence of this system, by shewing that there are great inconveniencies in taxes on consumption; this every one must grant: I know of but two taxes that are free from inconveniencies, the post-office and turnpikes; all others abound with them; but to dwell on the inconveniencies of excises, without shewing that they exceed those of land-taxes, is absurd: you had in France taxes on consumption to the amount of 260,000,000; we have them in England to a greater amount; the only question really to the purpose is this, can you bear an additional land-tax to that amount, in consequence of the benefit that would result from taking off the taxes on consumption? Mons. Necker has answered this question, with relation to France, in a manner that ought to shut the mouths of the œconomistes for ever; and in England there can be but one opinion: we are able to bear the taxes as they are laid at present; but if they were all absorbed on land, agriculture would receive at one stroke its mortal wound, and the nation would sink into utter ruin. We know, from experience, that the landed interest cannot possibly draw back their taxes; this truth, founded on incontrovertible facts, is decisive; and if they cannot draw them back, how is the rental of twenty millions to bear land-taxes to the amount of seventeen millions? And of what account is the mystical jargon of a new dialect||, relying on theory alone, when opposed to the innumerable facts which the present state of every country in Europe exhibits? This circumstance of drawing back a tax, which, with all well imagined duties on consumption, is universally effected, but is absolutely impracticable with land-taxes, is the great hinge on which this inquiry really turns. When Mons. Necker shews, that if the œconomical ideas were realized, there must be TWENTY-EIGHT VINGTIEMES raised in France; and when it is considered, that in England the rental of the kingdom is but a fifth§ more than the taxes of it, we possess in both cases the clearest and most explicit proofs that there would be an utter impossibility to commute the present taxes in either country, unless it were at the same time proved, that landlords could, in the price of their products, draw back some enormous taxes, the mere *advance* of which would be an intolerable burthen. But as it is manifest, from facts equally explicit, that no land-tax can be drawn back; that the product of land taxed at 4s. in the pound sells precisely at the same price as that of land taxed at no more than 4d.; and that prices never vary in the least in England from the land-tax being at 1s. or 4s. in the pound; nor in France when land pays one or three vingtiemes; when we are

* *Cabier*, p. 11. † *Etab. des Europ.* 4to. tom. iv. p. 640. ‡ *De la Mon. Pruss.* tom. iv. p. 53.

|| The writings of the œconomistes *scritti in un certo dialetto mistico*. *Impost secondo l'ordine della natura*. 12mo. 171. p. 15. § Including poor rates and tythes, taxes exceed the rental.

in possession, I say, of facts so decisive, there is the clearest ground to conclude, that the idea is visionary; that such an extension of land-taxes is utterly impracticable; and that every attempt towards the execution of these plans must be immediately pernicious to agriculture, and ultimately ruinous to every interest in the state.

Relative to the utter impossibility of extending land-taxes in England to such a degree as to include all others, I have it in my power to refer to an instance of our taxation most correctly given. I have inserted in the *Annals of Agriculture*, No. 86, an account of all the taxes I pay for my estate in Suffolk; and in that account it appears, that the track of land which pays me net 229l. 12s. 7d. pays to the burthens of the public 219l. 18s. 5d. Deducting from fifteen millions and a half (the net revenue of Great Britain) those taxes which enter into that sum of 219l. 18s. 5d. there remains ten millions and a half; and as the present land-tax, at two millions, burthens me 40l. a year, an additional one of ten millions and a half would consequently lay the further burthen of five and a half times as much, or 220l.; that is to say, it would leave me the net receipt of 9l. for the whole clear income of my estate! Perhaps the œconomistes never received, directly from facts, so convincing a proof as this instance offers, of the utter impracticability of their preposterous schemes. Yet these are the principles, sorry I am to remark, that seem at present to govern the National Assembly in matters of finance. To their honour, however—greatly to their honour—they do not seem inclined to go all the lengths which some of their members wish for: “puisque l'intérêt bien entendu decet trois grandes sources de la prospérité des nations, appuyé des noms imposans de Quesnay, de Turgot, de Gournay, de Mirabeau le père, de la Riviere, de Condorcet, de Schmidt, & de Leopold, & développé de nouveau dans ces derniers momens avec une logique si vigoureuse par M. Farcet n'a pas encore persuadé cette arbitraire inconsequente & despotique reine du monde qu'on appelle l'opinion*.” One cannot but smile at the figure the great Leopold makes; he is put in the rear, I suppose, because he never realized, in any one instance, the land-tax of the œconomistes, much to his credit.

The mischievous, and indeed infamous abuses in the collection of the *gabelles*, *droits d'aides*, and *droits de traites*, &c. have certainly been in a great measure the origin of that prejudice, so general in France against taxes on consumption: the cruelties practised in the collection, have been falsely supposed to flow, of necessity, from the nature of the taxes; but we know, from long experience, the contrary in England; and that excises, to a vast amount, may be raised without any such cruelties, as have been commonly practised by the old government in France. I am very far from contending that these taxes in England are free

* *De quelques ameliorations dans la perception de l'impôt*, par M. Dupont, p. 7.

from abuses ; and I am sensible, that there are cases in which the dealers in excised commodities feel themselves hardly dealt by ; and that liberty is attacked in their operation : but every one must also be sensible, that land-taxes are not free from objections equally strong. When the collector demands sums that are out of the power of the individual to pay, and seizes, by distress, the goods and chattels, to sell them, perhaps, for half their value ;—when we see the people stopping up their windows, denying themselves the enjoyment even of light itself, and submitting to live in dampness and in darkness, rather than pay a cruel tax on the property of houses ; when such hardships occur, it surely will not be thought, that it is duties on consumption only, that open to such abuses ; every sort of tax, except the post-office, is a heavy evil, and the only enquiry is, of so many ills, which is least ?

The smallness of the properties in land, is another insuperable objection to land-taxes in France : if fairly laid to the real value, on the possession of a few acres, they become the source of great misery : the man whose land gives him barely the necessaries of life, has nothing to spare for direct taxes ; he must depend for paying them on some other employment at best precarious, in a kingdom where population goes so much beyond employment, and where numbers starve from inability of maintenance. If, to avoid these evils, exemptions from the tax are given them, these small properties, the parent and origin, at best, of such multiplied distress, receive a direct encouragement, than which a more cruel policy could not be embraced. The only measure that would remedy both evils, is to prohibit the division of landed property into portions, below the ability of paying duties ; or else, to reject land-taxes altogether. A gross evil of these direct imposts is, that of moneyed men, or *capitalists*, escaping all taxation : none but duties on consumption affect them. In countries where land-taxes abound, these men will never become proprietors, for the simplest reason, because these taxes reduce the profit of possessing land below the profit of other investments. They live upon the interest of money in the public funds ; and the clearest principles of justice, call for a system of taxation that shall bring these men within its sphere ; this is only to be done by taxes on consumption ; by excises, customs, stamps, *entrees*, &c. ; and is a powerful reason for multiplying such taxes, instead of those on land. Under the regimen of land-taxes, all foreigners residing in a kingdom absolutely escape taxation ; but with duties on consumption they are made to contribute equally with the natives ; in such a kingdom as France, which always did, and ever will, attract many strangers, this is an object of some consequence. But, perhaps, the greatest objection to taxes upon land is, their preventing all improvements in agriculture, if they are equal ; and, if unequal, carrying with them the greatest principle of injustice, by being defective in the first requisite of all taxation. The greatest friends to this species

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of imposition, acknowledges the necessity of being equal. It is this that induces the Abbé Raynal to call a *cadaastre* *une belle institution*; and a late writer declares, “ Il n’est point de Pays ou il ne soit nécessaire d’inventorier tout le territoire dans le plus grand detail d’enregistrer chaque portion, d’en connoître les mutations d’en evaluer le revenu & ou si l’on desire de perpétuer l’imposition égale & proportionnelle il ne soit indispensable de suivre la progression du revenue * :”—and this method he explains afterwards, by asserting the absolute necessity of having a new valuation every nine years; and he finds fault † with the King of Sardinia’s *cadaastre*, because the valuation has never been renewed. Another of these politicians observes, that the excellency of a tythe, as a mode of taxation, is, that if improvements are extended, or lands cultivated with more care, the revenue of the state increases with it ‡. In the same spirit, many of the *cabiers* demanded the suppression of all duties on consumption ||.—I could multiply such sentiments almost to fill a volume, if I were to go back to consult the deluge of writings which infested France five-and-twenty years ago, but I quote only some living authors, who hold these pernicious doctrines at present, and whose writings are received with submission by the National Assembly, adopted, and in part carried into execution.

Thus would these writers reject the only advantage found in the land-taxes of Milan, Piedmont, and England, that of permanence: they call for valuations of every improvement the moment it is effected in order to tax it, to what amount? To that of absorbing all the imposts of a modern state, to the amount of twenty-seven vingtiemes in France; and to that of a rental of twenty millions paying seventeen in England! To reason upon such extravagance would be an idle waste of time; but I shall not dismiss the subject without remarking, that if the National Assembly adopts the tax recommended by their committee, of 300 millions, and should, upon these principles, make it a variable one, though never rising in its amount above that sum, the mere mutation of easing a wretched, poor, slovenly farmer, and loading proportionally an improving one, will absolutely prohibit all ameliorations of the national agriculture: and if they shall draw these variations to the profit of the state, by increasing the total sum proportionably to such improvements, they will still prevent them, as no man will invest his capital in any industrious employment in which the state taxes his profits.

Duties on consumption do not affect the industrious, they fall principally on the idle consumer, where they ought to fall, and consequently manufacturers.

* *Le Trône Ad. Prov.* tom. i. pref. xiv.

† *Ibid.* p. 235.

‡ *Plan d’Admin. des Finances*, par M. Malport. 1787. p. 34.

|| *Noblesse de Lyon*, p. 16. *Bugey*, p. 28. *Troyes Tiers Etat*, art. 13. *Etampes*, art. 33. *Nîmes*, p. 44. There is not a tax existing in France, which is not demanded in some cahier to be suppressed.

and merchants, as we have ample experience in England, are not deterred from investing their capitals in employments subjected to those taxes, for their profits absolutely escape the tax, till by a voluntary consumption they class themselves (in spending those profits), among the non-industrious; then they not only advance the tax, but really pay it, as it is right they should; but with land-taxes the case is totally different, because they cannot be drawn back; an industrious manufacturer calculates the profits his capital will yield him under the pressure of taxes on consumption; he estimates the *advance* only of the tax, charging upon his goods the interest of that advance, and thus the tax is to him merely inconvenience, in requiring a larger capital; but an industrious farmer, calculating in like manner, the profit of his capital invested under the pressure of land-taxes, finds, in a moment, that with him it is not merely advancing the tax, but actually paying and bearing it; it comes then immediately upon him as a deduction from his profit; and if it is proportional and equal, not a shilling of that profit escapes. What is the self-evident consequence? Most clearly that he will not make such an investment, but turn his money to other employments that will pay him better: and can it be necessary, at this time of day, to point out the mischief of turning capitals from agriculture to any other employment; or, which is the same thing, preventing their being invested in it?

As I have mentioned several writers in favour of land-taxes, in terms of that condemnation, absolutely necessary by a friend of agriculture, it is no more than justice to observe, that France contains some others, whose writings are free from this great objection. Mons. Necker, in his treatise on the administration of the finances, gives the preference to taxes on consumption, and shews the utter impossibility of a land-tax absorbing all others. The Marquis de Cassaux* also has attempted, with much force of reason, to prove, that the land-taxes of France and England *ought to be converted into duties on consumption*. And some of the best writers of that vast collection, in which the physiocratical science originated, are of the same opinion. Proportional imposts, on the consumption of commodities are *the most just, the most productive, and the least burthensome to a people, because paid daily and imperceptibly*†. And the nobility of Quercy have, in their *cabier*, a passage, which does honour to their good sense: “Considerant que l’impôt indirect a l’inappréciable avantage d’une perception imperceptible & spontanée: que le contribuable ne la paye qu’au moment ou il en a les moyens: qu’il frappe sur les capitalistes dont le genre de fortune échappe à toute autre impôt: que la mesure des consommations étant en général celle des richesses il atteint par sa nature à une justice de repartition d’ont l’impôt direct

* *Mechanisme des Sociétés*, 8vo. 1785. p. 222.

† *Encyclopedie*. folio. tom. viii. p. 602.

n'est pas fuceptible *.—These are sterling and wise principles, in few words, developed in the most striking features.

Of Simplicity in Taxation.

So many of the *cabiers* of France unite with the *œconomistes*, in calling for the utmost simplicity in taxation, by means of one only and uniform proportional impost on land, that it merits a short inquiry, how far this theory of simplicity is, in itself, deserving of the ideas entertained of it. There can be no doubt of the advantage of a cheap collection attending this or any plan of simplicity; but there are reasons for thinking that this benefit would be purchased at an expence a thousand times greater than it is worth. I do not love recurring to, or depending altogether on reasoning, when facts are at hand on which we can build our conclusions: the taxes of England are infinitely various; much more so than those of France, especially in the articles of excises and stamps; our taxes are also very great; in proportion to the population of the kingdom, much more than double those of France; yet, with this vast burthen, they are borne by the people with much more ease than the French nation bears less than the half. This is to be attributed not to one cause only, but to many; but amongst those causes, I believe, will be found this great variety of points on which they bear. The mere circumstance of taxes being very numerous, in order to raise a given sum, is a considerable step towards equality in the burthen falling on the people; If I was to define a good system of taxation, it should be that of *bearing lightly on an infinite number of points, heavily on none*. In other words, that simplicity in taxation is the greatest additional weight that can be given to taxes, and ought, in every country, to be most sedulously avoided.—By a system of simplicity in taxation, let it be exerted in whatever method, whether on land, on persons, or on consumption, there will always be classes of the people much lighter taxed than other classes; and this inequality will throw an oppressive burthen on those who are most exposed to the operation of whatever tax is chosen. No one is a greater enemy than I am to land-taxes; but such is the advantage of an extremely various system, that I would not contend for taking them entirely off in any country. A land-tax of 6d. 9d. or perhaps 1s. in the pound, but permanent, would be so light a burthen, that it might be borne, without the mischief of impeding agriculture. Taxes on windows are amongst the very worst that can be laid; but as far as 3d. each, might not be liable to much objection. Unfortunately for France, the favourite idea there is the very contrary one—that of simplicity. It would have been wise not absolutely to suppress any one of their taxes, not even the *ga-*

belle itself: removing the abuses that flow from farming a revenue, introducing into the receipt the mildness of a free government, and changing entirely the mode of collection, would have removed the chief objections to those taxes which have been abolished, and have saved the enormous evil, now necessary, of loading land. This subject is a fruitful one, worthy the attention of able pens expressly employed on it, the rapid sketches which can alone be given by a traveller will allow of mere hints.

C H A P. XXI.

On the Revolution of France.

THE gross infamy which attended *lettres de cachet* and the Bastile, during the whole reign of Louis XV. made them esteemed in England, by people not well informed, as the most prominent features of the despotism of France. They were certainly carried to an excess hardly credible; to the length of being sold, with blanks, to be filled up with names at the pleasure of the purchaser; who was thus able, in the gratification of private revenge, to tear a man from the bosom of his family, and bury him in a dungeon, where he would exist forgotten, and die unknown *!—But such excesses could not be common in any coun-

* An anecdote, which I have from an authority to be depended on, will explain the profligacy of government, in respect to these arbitrary imprisonments. Lord Albemarle, when ambassador in France, about the year 1753, negotiating the fixing of the limits of the American colonies, which, three years after, produced the war, calling one day on the minister for foreign affairs, was introduced, for a few minutes, into his cabinet, while he finished a short conversation in the apartment in which he usually received those who conferred with him. As his lordship walked backwards and forwards, in a very small room (a French cabinet is never a large one), he could not help seeing a paper lying on the table, written in a large legible hand, and containing a list of the prisoners in the Bastile, in which the first name was Gordon. When the minister entered, lord Albemarle apologized for his involuntary remarking the paper; the other replied that it was not of the least consequence, for they made no secret of the names. Lord A. then said, that he had seen the name of Gordon first in the list, and he begged to know, as in all probability the person of this name was a British subject, on what account he had been put into the Bastile. The minister told him that he knew nothing of the matter, but would make the proper inquiries. The next time he saw lord Albemarle, he informed him, that, on inquiring into the case of Gordon, he could find no person who could give him the least information; on which he had had Gordon himself interrogated, who solemnly affirmed, that he had not the smallest knowledge, or even suspicion, of the cause of his imprisonment, but that he had been confined 30 years; however, added the minister, I ordered him to be immediately released, and he is now at large. Such a case wants no comment.

try ; and they were reduced almost to nothing, from the accession of the present King. The great mass of the people, by which I mean the lower and middle ranks, could suffer very little from such engines, and as few of them are objects of jealousy, had there been nothing else to complain of, it is not probable they would ever have been brought to take arms. The abuses attending the levy of taxes were heavy and universal. The kingdom was parcelled into generalities, with an intendant at the head of each, into whose hands the whole power of the crown was delegated for every thing except the military authority ; but particularly for all affairs of finance. The generalities were subdivided into elections, at the head of which was a *sub-delegué*, appointed by the intendant. The rolls of the *taille*, *capitation*, *vingtièmes*, and other taxes, were distributed among districts, parishes, and individuals, at the pleasure of the intendant, who could exempt, change, add, or diminish at pleasure. Such an enormous power, constantly acting, and from which no man was free, must, in the nature of things, degenerate in many cases into absolute tyranny. It must be obvious, that the friends, acquaintances, and dependents of the intendant, and of all his *sub-delegués*, and the friends of these friends, to a long chain of dependence, might be favoured in taxation at the expence of their miserable neighbours ; and that noblemen, in favour at court, to whose protection the intendant himself would naturally look up, could find little difficulty in throwing much of the weight of their taxes on others, without a similar support. Instances, and even gross ones, have been reported to me in many parts of the kingdom, that made me shudder at the oppression to which numbers must have been condemned, by the undue favours granted to such crooked influence. But, without recurring to such cases, what must have been the state of the poor people paying heavy taxes, from which the nobility and clergy were exempted ? A cruel aggravation of their misery, to see those who could best afford to pay, exempted because able !—The inrollments for the militia, which the *cabiers* call *an injustice without example* *, were another dreadful scourge on the peasantry ; and, as married men were exempted from it, occasioned in some degree that mischievous population, which brought beings into the world, in order for little else than to be starved. The *corvées*, or police of the roads, were annually the ruin of many hundreds of farmers ; more than 300 were reduced to beggary in filling up one vale in Lorraine : all these oppressions fell on the *tiers état* only ; the nobility and clergy having been equally exempted from *tailles*, militia, and *corvées*. The penal code of finance makes one shudder at the horrors of punishment inadequate to the crime †. A few features will sufficiently characterize the old government of France :

1. Smugglers

* *Nob. Briey*, p. 6. &c. &c.

† It is calculated by a writer (*Recherches et Consid. par M. le Baron de Cormeré*, tom. ii. p. 187.), very well informed on every subject of finance, that, upon an average, there were annually taken up and
sent

1. Smugglers of salt, armed and assembled to the number of five, in Provence, *a fine of 500 liv. and nine years gallies*;—in all the rest of the kingdom, *death*.

2. Smugglers armed, assembled, but in number under five, *a fine of 300 liv. and three years gallies*. Second offence, *death*.

3. Smugglers, without arms, but with horses, carts, or boats, *a fine of 300 liv. if not paid, three years gallies*. Second offence, *400 liv. and nine years gallies*.—In Dauphiné, second offence, *gallies for life*. In Provence, *five years gallies*.

4. Smugglers, who carry the salt on their backs, and without arms, *a fine of 200 liv. and, if not paid, are flogged and branded*. Second offence, *a fine of 300 liv. and six years gallies*.

5. Women, married and single, smugglers, first offence, *a fine of 100 liv.* Second, *500 liv.* Third, *flogged, and banished the kingdom for life*. Husbands responsible both in fine and body.

6. Children smugglers, the same as women.—*Fathers and mothers responsible; and for defect of payment flogged*.

Nobles, if smugglers, *deprived of their nobility; and their houses razed to the ground*.

8. Any persons in employments (I suppose employed in the salt-works or the revenue), if smugglers, *death*. And such as assist in the theft of salt in the transport, *hanged*.

9. Soldiers smuggling, with arms, are *hanged*; without arms, *gallies for life*.

10. Buying smuggled salt to resell it, *the same punishments as for smuggling*.

11. Persons in the salt employments, *empowered if two, or one with two witnesses, to enter and examine houses even of the privileged orders*.

12. All families, and persons liable to the *taille*, in the provinces of the *Grandes Gabelles* inrolled, and their consumption of salt for the *pot and salière* (that is the daily consumption, exclusive of salting meat, &c. &c.) estimated at

sent to prison or the gallies, Men, 2340. Women, 896. Children, 201. Total, 3437. 300 of these to the gallies (tom. i. p. 112.) The salt confiscated from these misérables amounted to 12,633 quintals, which, at the mean price of 8 liv. are

2772 lb. of salted flesh, at 10 s.	-	-	101,064 liv.
1086 horses, at 50 liv	-	-	1,386
52 carts, at 150 liv.	-	-	54,300
Fines,	-	-	7,800
Seized in houses	-	-	53,297
			105,530
			<hr/>
			323,287

7lb. a head per annum, which quantity they are forced to buy whether they want it or not, under the pain of various fines according to the case.

The *Capitaineries* were a dreadful scourge on all the occupiers of land. By this term, is to be understood the paramountship of certain districts, granted by the king, to princes of the blood, by which they were put in possession of the property of all game, even on lands not belonging to them; and, what is very singular, on manors granted long before to individuals; so that the erecting of a district into a *capitainerie*, was an annihilation of all manerial rights to game within it. This was a trifling business, in comparison of other circumstances; for, in speaking of the preservation of the game in these *capitaineries*, it must be observed, that by game must be understood whole droves of wild boars, and herds of deer not confined by any wall or pale, but wandering, at pleasure, over the whole country, to the destruction of crops; and to the peopling of the gallies by the wretched peasants, who presumed to kill them, in order to save that food which was to support their helpless children. The game in the *capitainerie* of Montceau, in four parishes only, did mischief to the amount of 184,263 liv. per annum *. No wonder then that we should find the people asking, “*Nous demandons à grand cris la destruction des capitaineries & celle de toute sorte de gibier †.*” And what are we to think of demanding, as a favour, the permission—“*De nettoyer ses grains de faucher les prés artificiels, & d’enlever ses chanvres sans égard pour la perdrix on tout autre gibier ‡.*” Now an English reader will scarcely understand it without being told, that there were numerous edicts for preserving the game which prohibited weeding and hoeing, lest the young partridges should be disturbed; steeping seed, lest it should injure the game; manuring with night soil, lest the flavour of the partridges should be injured by feeding on the corn so produced; mowing hay, &c. before a certain time, so late as to spoil many crops; and taking away the stubble, which would deprive the birds of shelter. The tyranny exercised in these *capitaineries*, which extended over 400 leagues of country, was so great, that many *cabiers* demanded the utter suppression of them ||. Such were the exertions of arbitrary power which the lower orders felt directly from the royal authority; but, heavy as they were, it is a question whether the others, suffered circuitously through the nobility and the clergy, were not yet more oppressive? Nothing can exceed the complaints made in the *cabiers* under this head. They speak of the dispensation of justice in the manerial courts, as comprising every species of despotism: the districts indeterminate—appeals endless--irreconcilable to liberty and prosperity--and irrevocably

* *Cabier du tiers état de Maaux*, p. 49.

† *De Montes and Meulan*, p. 38.

‡ *Ibid*, p. 40.—Also, *Nob. & Tier Etat de Perone*, p. 42. *De Trois ordres de Montfort*, p. 28.

|| *Clergé de Provins & Montereau*, p. 35.—*Clergé de Paris* p. 25.—*Clergé de Mantes & Meulan*, p. 45, 46. *Clergé de Laon*, p. 11.—*Nob. de Nemours*, p. 17.—*Nob. de Paris*, p. 22.—*Nob. d’Arras*, p. 29.

proscribed in the opinion of the public*—augmenting litigations—favouring every species of chicane—ruining the parties—not only by enormous expences on the most petty objects, but by a dreadful loss of time. The judges commonly ignorant pretenders, who hold their courts in *cabarets*, and are absolutely dependent on the seigneurs†. Nothing can exceed the force of expression used in painting the oppressions of the seigneurs, in consequence of their feudal powers. They are “*vexations qui sont le plus grand fléau des peuples*‡.—*Esclavage affligeant*§.—*Ce regime desastreux*§.—That the *feodalité* be for ever abolished. The countryman is tyrannically enslaved by it. Fixed and heavy rents; vexatious processes to secure them; appreciated unjustly to augment them: rents, *solidaires*, and *revenchables*; rents, *chéantes*, and *levantes*; *fumages*. Fines at every change of the property, in the direct as well as collateral line; feudal redemption (*retraite*); fines on sale, to the 8th and even the 6th penny; redemptions (*rachats*) injurious in their origin, and still more so in their extension: *banalité* of the mill¶, of the oven, and of the wine and cyder-presses; *corvées* by custom; *corvées* by usage of the fief; *corvées* established by unjust decrees; *corvées* arbitrary, and even phantastical; servitudes; *prestations*, extravagant and burthensome; collections by assessments incollectible; *aveux*, *minus*, *impuniessements*; litigations ruinous and without end: the rod of seigneurial finance for ever shaken over our heads; vexation, ruin, outrage, violence, and destructive servitude, under which the peasants, almost on a level with Polish slaves, can never but be miserable, vile, and oppressed**. They demand also, that the use of hand-mills be free; and hope that posterity, if possible, may be ignorant that feudal tyranny in Bretagne, armed with the judicial power, has not blushed even in these times at breaking hand-mills, and at selling annually to the miserable the faculty of bruising between two stones a measure of buck-wheat or barley††. The very terms of these complaints are unknown in England, and consequently untranslatable: they have probably arisen long since the feudal system ceased in this kingdom. What are these tortures of the peasantry in Bretagne, which they call *chevanchés*, *quintaines*, *soule*, *saut de poison*, *baïser de mariées*; *chansons*; *transporte d'œuf sur un charette*; *silence des grenouilles*‡‡; *corvée a misericorde*; *mi-*

* Rennes, art. 12.

† Nevernois, art. 43.

‡ Tier Etat de Vannes, p. 24.

§ T. Etat Clermont Ferrand. p. 52.

§ T. Etat. Auxerre, art. 6.

¶ By this horrible law, the people are bound to grind their corn at the mill of the seigneur only; to press their grapes at his press only; and to bake their bread in his oven; by which means the bread is often spoiled, and more especially wine, since in Champagne those grapes which, pressed immediately, would make white wine, will, by waiting for the press, which often happens, make red wine only.

** Tiers Etat Rennes, p. 159.

†† Rennes, p. 57.

‡‡ This is a curious article: when the lady of the seigneur lies in, the people are obliged to beat the waters in marshy districts, to keep the frogs silent, that she may not be disturbed; this duty, a very oppressive one, is commuted into a pecuniary fine.

lods; leide; couponage; cartelage; barage; fouage; marechaussée; ban vin; ban d'about; trousses; gelinage; civerage; taillabilité; vingtain; sterlage; bordelage; minage; ban de vendanges; droit d'accapte *. In passing through many of the French provinces, I was struck with the various and heavy complaints of the farmers and little proprietors of the feudal grievances, with the weight of which their industry was burthened; but I could not then conceive the multiplicity of the shackles which kept them poor and depressed. I understood it better afterwards, from the conversation and complaints of some grand seigneurs, as the revolution advanced; and I then learned, that the principal rental of many estates consisted in services and feudal tenures; by the baneful influence of which, the industry of the people was almost exterminated. In regard to the oppressions of the clergy, as to tythes, I must do that body a justice, to which a claim cannot be laid in England. Though the ecclesiastical tenth was levied in France more severely than usual in Italy, yet was it never exacted with such horrid greediness as is at present the disgrace of England. When taken in kind, no such thing was known in any part of France, where I made inquiries, as a tenth: it was always a twelfth, or a thirteenth, or even a twentieth of the produce. And in no part of the kingdom did a new article of culture pay any thing: thus turnips, cabbages, clover, chicorée, potatoes, &c. &c. paid nothing. In many parts, meadows were exempted. Silk worms nothing. Olives in some places paid—in more they did not. Cows nothing. Lambs from the 12th to the 21st. Wool nothing.—Such mildness, in the levy of this odious tax, is absolutely unknown in England. But mild as it was, the burthen to people groaning under so many other oppressions, united to render their situation so bad that no charge could be for the worse †. But these were not all the evils with which the people struggled. The administration of justice was partial, venal, infamous. I have, in conversation with many very sensible men, in different parts of the kingdom, met with something of content with their government, in all other respects than this; but upon the question of expecting justice to be really and fairly administered, every one confessed there was no such thing to be looked for. The conduct of the parliaments was profligate and atrocious. Upon almost every cause that came before them, interest was openly made with the judges: and woe betided the man who, in a cause to support, had no means of conciliating favour, either by the beauty of a handsome wife, or by other methods. It has been said, by many writers, that property was as secure under the old government of France

* *Resumé des cahiers*, tom. iii. p. 316, 317.

† They have found since how erroneous this opinion was, and that great as their evils were, they have been aggravated into a more exterminating despotism under the fictitious names of liberty and equality.

as it is in England; and the assertion might possibly be true, as far as any violence from the King, his ministers, or the great was concerned: but for all that mass of property, which comes in every country to be litigated in courts of justice, there was not even the shadow of security, unless the parties were totally and equally unknown, and totally and equally honest; in every other case, he who had the best interest with the judges, was sure to be the winner. To reflecting minds, the cruelty and abominable practice attending such courts are sufficiently apparent. There was also a circumstance in the constitution of these parliaments, but little known in England, and which, under such a government as that of France, must be considered as very singular. They had the power, and were in the constant practice of issuing decrees, without the consent of the crown, and which had the force of laws through the whole of their jurisdiction; and of all other laws, these were sure to be the best obeyed; for as all infringements of them were brought before sovereign courts, composed of the same persons who had enacted these laws (a horrible system of tyranny!) they were certain of being punished with the last severity. It must appear strange, in a government so despotic in some respects as that of France, to see the parliaments in every part of the kingdom making laws without the King's consent, and even in defiance of his authority. The English, whom I met in France in 1789, were surprised to see some of these bodies issuing arrets against the export of corn out of the provinces subject to their jurisdiction, into the neighbouring provinces, at the same time that the King, through the organ of so popular a minister as Mons. Necker, was decreeing an absolutely free transport of corn throughout the kingdom, and even at the requisition of the National Assembly itself. But this was nothing new; it was their common practice. The parliament of Rouen passed an arret against killing of calves; it was a preposterous one, and opposed by administration; but it had its full force; and had a butcher dared to offend against it, he would have found, by the rigour of his punishment, who was his master. Inoculation was favoured by the court in Louis XV.'s time; but the parliament of Paris passed an arret against it, much more effective in prohibiting, than the favour of the court in encouraging that practice. Instances are innumerable, and I may remark, that the bigotry, ignorance, false principles, and tyranny of these bodies were generally conspicuous; and that the court (taxation excepted) never had a dispute with a parliament, but the parliament was sure to be wrong. Their constitution, in respect to the administration of justice, was so truly rotten, that the members sat as judges, even in causes of private property, in which they were themselves the parties, and have, in this capacity, been guilty of oppressions and cruelties, which the crown has rarely dared to attempt.

It is impossible to justify the excesses of the people on their taking up arms; they were certainly guilty of cruelties; it is idle to deny the facts, for they have been

proved too clearly to admit of a doubt. But is it really the people to whom we are to impute the whole?—Or to their oppressors, who had kept them so long in a state of bondage? He who chooses to be served by slaves, and by ill-treated slaves, must know that he holds both his property and life by a tenure far different from those who prefer the service of well-treated freemen; and he who dines to the music of groaning sufferers, must not, in the moment of insurrection, complain that his daughters are ravished, and then destroyed; and that his sons' throats are cut. When such evils happen, they surely are more imputable to the tyranny of the master, than to the cruelty of the servant. The analogy holds with the French peasants—the murder of a seigneur, or a chateau in flames, is recorded in every newspaper; the rank of the person who suffers, attracts notice; but where do we find the register of that seigneur's oppressions of his peasantry, and his exactions of feudal services, from those whose children were dying around them for want of bread? Where do we find the minutes that assigned these starving wretches to some vile petty-fogger, to be fleeced by impositions, and a mockery of justice, in the seigneurial courts? Who gives us the awards of the intendant and his *sub-delegates*, which took off the taxes of a man of fashion, and laid them with accumulated weight, on the poor, who were so unfortunate as to be his neighbours? Who has dwelt sufficiently upon explaining all the ramifications of despotism, regal, aristocratical, and ecclesiastical, pervading the whole mass of the people; reaching, like a circulating fluid, the most distant capillary tubes of poverty and wretchedness? In these cases, the sufferers are too ignoble to be known; and the mass too indiscriminate to be pitied. But should a philosopher feel and reason thus? should he mistake the cause for the effect? and giving all his pity to the few, feel no compassion for the many, because they suffer in his eyes not individually, but by millions? The excesses of the people cannot, I repeat, be justified; it would undoubtedly have done them credit, both as men and christians, if they had possessed their new acquired power with moderation. But let it be remembered, that the populace in no country ever use power with moderation; excess is inherent in their aggregate constitution: and as every government in the world knows, that violence infallibly attends power in such hands, it is doubly bound in common sense, and for common safety, so to conduct itself, that the people may not find an interest in public confusions. They will always suffer much and long, before they are effectually roused; nothing, therefore, can kindle the flame, but such oppressions of some classes or order in the society, as give able men the opportunity of seconding the general mass; discontent will soon diffuse itself around; and if the government take not warning in time, it is alone answerable for all the burnings, and plunderings, and devastation, and blood that follow. The true judgment to be formed of the French revolution, must surely be gained, from an attentive consideration of the evils of the old government: when these are well understood—and when the extent and universality

lity of the oppression under which the people groaned—oppression which bore upon them from every quarter, it will scarcely be attempted to be urged, that a revolution was not absolutely necessary to the welfare of the kingdom. Not one opposing voice* can, with reason, be raised against this assertion: abuses ought certainly to be corrected, and corrected effectually: this could not be done without the establishment of a new form of government; whether the form that has been adopted were the best, is another question absolutely distinct. But that the above-mentioned detail of enormities practised on the people required some great change is sufficiently apparent; and I cannot better conclude such a list of detestable oppressions, than in the words of the *Tiers Etat* of Nivernois, who hailed the approaching day of liberty, with an eloquence worthy of the subject.

“ Les plaintes du peuple se sont long-temps perdues dans l’espace immense qui le sépare du trône: cette classe la plus nombreuse & la plus intéressante de la société; cette classe qui mérite les premiers soins du gouvernement, puisqu’elle alimente toutes les autres; cette classe à laquelle on doit les arts nécessaires à la vie, & ceux qui en embellissent le cours; cette classe enfin qui en recueillent moins à toujours payé davantage, peut-elle après tant de siècles d’oppression & de misère compter aujourd’hui sur un sort plus heureux? Ce seroit pour ainsi dire blasphémer l’autorité tutélaire sous laquelle nous vivons, que d’en douter un seul moment. Un respect aveugle pour les abus établis ou pour la violence ou par la superstition, une ignorance profonde des conditions du pacte social voila ce qui a perpétué jusqu’à nous la servitude dans laquelle ont gemi nos pères. Un jour plus pure est près d’éclorre: le roi a manifesté le desir de trouver des sujets capables de lui dire la vérité; une de ses loix l’edit de création des assemblées provinciales du moi de Juin 1787, annonce que le vœu le plus pressant de son cœur sera toujours celui qui tendra au soulagement & au bonheur de ses peuples: une autre loi qui a retenti du centre du Royaume à ses dernières extrémités nous a promis la restitution de tous nos droits, dont nous n’avions perdu,

* Many opposing voices have been raised; but so little to their credit, that I leave the passage as it was written long ago. The abuses that are rooted in all the old governments of Europe, give such numbers of men a direct interest in supporting, cherishing, and defending abuses, that no wonder advocates for tyranny, of every species, are found in every country, and almost in every company. What a mass of people, in every part of England, are some way or other interested in the present representation of the people, tythes, charters, corporations, monopolies, and taxation! and not merely to the things themselves, but to all the abuses attending them; and how many are there who derive their profit or their consideration in life, not merely from such institutions, but from the evils they engender! The great mass of the people, however, is free from such influence; and will be enlightened by degrees; assuredly they will find out, in every country of Europe, that by combinations, on the principles of liberty and property, aimed equally against regal, aristocratical, and mobbish tyranny, they will be able to resist successfully, that variety of combination, which, on principles of plunder and despotism, is every where at work to enslave them.

& dont nous ne pouvions perdre que l'exercice puisque le fond de ces mêmes droits est inaliénable & imprescriptible. Osons donc secouer le joug des anciennes erreurs: osons dire tout ce qui est vrai, tout ce qui est utile; osons réclamer les droits essentiels & primitifs de l'homme: la raison, l'équité, l'opinion générale, la bienfaisance connue de notre auguste souverain tout concourt à assurer le succès de nous doléances."

Having seen the propriety, or rather the necessity, of some change in the government, let us next briefly inquire into the effects of the revolution on the principal interests in the kingdom.

In respect to all the honours, power, and profit derived to the nobility from the feudal system, which was of an extent in France beyond any thing known in England since the revolution, or long parliament in 1640, all is laid in the dust, without a rag or remnant being spared*: the importance of these, both in influence and revenue, was so great, that the result is all but ruin to numbers. However, as these properties were real tyrannies; as they rendered the possession of one spot of land ruinous to all around it—and equally subversive of agriculture, and the common rights of mankind, the utter destruction brought on all this species of property, does not ill deserve the epithet they are so fond of in France; it is a real regeneration of the people to the privileges of human nature. No man of common feelings can regret the fall of that abominable system, which made a whole parish slaves to the lord of the manor. But the effects of the revolution have gone much farther; and have been attended with consequences not equally justifiable. The rents of land, which are as legal under the new government as they were under the old, are no longer paid with regularity. I have been lately informed (August 1791), on authority not to be doubted, that associations among tenantry, to a great amount and extent, have been formed, even within fifty miles of Paris, for the non-payment of rent; saying, in direct terms, we are strong enough to detain the rent, and you are not strong enough to enforce the payment. In a country where such things are possible, property of every kind, it must be allowed, is in a dubious situation. Very evil conse-

* It is to be observed, that the orders of knighthood were at first preserved; when the National Assembly, with a forbearance that did them honour, refused to abolish those orders, because personal, of merit, and not hereditary, they were guilty of one gross error. They ought immediately to have addressed the King, to institute a new order of knighthood—**KNIGHTS OF THE PLOUGH**. There are doubtless little souls that will smile at this, and think a thistle, a garter, or an eagle more significant, and more honourable; I say nothing of orders, that exceed common sense and common chronology, such as St. Esprit, St. Andrew, and St. Patrick, leaving them to such as venerate most what they least understand. But that prince, who should first institute this order of rural merit, will reap no vulgar honour: Leopold, whose twenty years of steady and well earned Tuscan fame gives him a good right to do it with propriety, might, as Emperor, institute it with most effect. In him, such an action would have in it nothing of affectation. But I had rather that **THE PLOUGH** had thus been honoured by a free assembly. It would have been a trait, that marked the philosophy of a new age, and a new system.

quences

quences will result from this; arrears will accumulate too great for landlords to lose, or for the peasants to pay, who will not easily be brought to relish that order and legal government, which must necessarily secure these arrears to their right owners. In addition to all the rest, by the new system of taxation, there is laid a land-tax of 300 millions, or not to exceed 4s. in the pound; but, under the old government, their *vingtiemes* did not amount to the seventh part of such an impost. In whatever light, therefore, the case of French landlords is viewed, it will appear, that they have suffered immensely by the revolution.—That many of them deserved it, cannot, however, be doubted, since we see their *cabiers* demanding steadily, that all their feudal rights should be confirmed*: that the carrying of arms should be strictly prohibited to every body but noblemen†: that the infamous arrangements of the militia should remain on its old footing‡: that breaking up wastes, and inclosing commons, should be prohibited||: that the nobility alone should be eligible to enter into the army, church, &c.§: that *lettres de cachet* should continue*: that the press should not be free††: and, in fine, that there should be no free corn trade‡‡.

To the clergy, the revolution has been yet more fatal. One word will dispatch this inquiry. The revolution was a decided benefit to all the lower clergy of the kingdom; but it was destructive of all the rest. It is not easy to know what they lost on the one hand, or what the national account will gain on the other. Monf. Necker calculates their revenue at 130,000,000 liv. of which only 42,500,000 liv. were in the hands of the *curées* of the kingdom. Their wealth has been much exaggerated: a late writer says, they possessed half the kingdom|||. Their number was as little known as their revenue; one writer makes them 400,000 §§; another 81,400*†; a third 80,000*‡.

* Evreux, p. 32.—Bourbonnois, p. 14.—Artois, p. 22.—Bazas, p. 8.—Nivernois, p. 7.—Poitou, p. 13.—Saintonge, p. 5.—Orleans, p. 19.—Chaumont, p. 7.

† Vermaudois, p. 41.—Quesnoy, p. 19.—Sens, p. 25.—Evreux, p. 36.—Sesanne, p. 17.—Bar-sur-Seine, p. 6.—Beauvais, p. 13.—Bugey, p. 34.—Clermont Ferand, p. 11.

‡ Limoges, p. 36. || Cambrai, p. 19.—Pont a Mousson, p. 38.

§ Lyon, p. 13.—Touraine, p. 31.—Angoumois, p. 13.—Auxerre, p. 13. The Author of the *Historical Sketch of the French Revolution*, 8vo. 1792, says, p. 68, "the worst enemies of nobility have not yet brought to light any *cabier*, in which the nobles insisted on their exclusive right to military preferments."—In the same page this gentleman says, it is impossible for any Englishman to study four or five hundred *cabiers*. It is evident, however, from this mistake, how necessary it is to examine them before writing on the revolution.

** Vermaudois, p. 23.—Chalons-sur-Marne, p. 6.—Gien, p. 9. †† Crepy, p. 10.

‡‡ St. Quentin, p. 9. || De l'Autorité de Montesquieu dans la revolution présenté. 8vo. 1789. p. 61. §§ Etats Generaux convoqués, par Louis XVI. par M. Target, prem. suite, p. 7.

*† Qu'est-ce que le Tiers Etat, 3d edit. par M. l'Abbé Siéyès. 840. p. 51.

*‡ Bibliotheque de l'homme publique, par M. Condorcet, &c. tom. iii.

The clergy in France have been supposed, by many persons in England, to merit their fate from their peculiar profligacy. But the idea is not accurate: that so large a body of men, possessed of very great revenues, should be free from vice, would be improbable, or rather impossible; but they preserved, what is not always preserved in England, an exterior decency of behaviour. One did not find among them poachers or fox-hunters, who, having spent the morning in scampering after hounds, dedicate the evening to the bottle, and reel from inebriety to the pulpit. Such advertisements were never seen in France as I have heard of in England:—*Wanted a curacy in a good sporting country, where the duty is light, and the neighbourhood convivial.* The proper exercise for a country clergyman is the employment of agriculture; which demands strength and activity—and which, vigorously followed, will fatigue enough to give ease its best relish. A sportsman parson may be, as he often is in England, a good sort of man, and *an honest fellow*; but certainly this pursuit, and the resorting to obscene comedies, and kicking their heels in the jig of an assembly, are not the occupations for which we can suppose tythes were given*. Whoever will give any attention to the demands of the clergy in their *cabiers*, will see, that there was, on many topics, an ill spirit in that body. They maintain, for instance, that the liberty of the press ought rather to be restrained than extended†: that the laws against it should be renewed and executed‡: that admission into religious orders should be, as formerly, at sixteen years of age||: that *lettres de cachet* are useful, and even necessary§. They solicit to prohibit all division of commons¶;—to revoke the edict allowing inclosures**; that the export of corn be not allowed††; and that public granaries be established‡‡.

The ill effects of the revolution have been felt more severely by the manufacturers of the kingdom, than by any other class of the people. The rivalry of the English fabrics, in 1787 and 1788, was strong and successful; and the confusions that followed in all parts of the kingdom, had the effect of lessening the incomes of so many landlords, clergy, and men in public employments; and such numbers fled from the kingdom, that the general mass of the consumption of national fabrics sunk perhaps three-fourths. The men, whose incomes were untouched, lessening their consumption greatly, from an apprehension of the unsettled state of things: the prospects of a civil war, suggested to every man, that his safety, perhaps his future bread, depended on the money which he could hoard. The inevitable consequence, was turning absolutely out of employment

* Nothing appears so scandalous to all the clergy of Europe, as their brethren in England dancing at public assemblies; and a bishop's wife engaged in the same amusement, seems to them as preposterous as a bishop, in his lawn sleeves, following the same diversion, would to us. Probably both are wrong.

† Saintonge, p. 24.—Limoges, p. 6. &c.

‡ Lyon, p. 13.—Dourdan, p. 5.

|| Saintonge, p. 26.—Montargis, p. 10.

§ Limoges, p. 22.

¶ Troyes, p. 11.

** Metz, p. 11.

†† Rouen, p. 24.

‡‡ Laon, p. 11.—Dourdan, p. 17.

immense numbers of workmen. I have, in the diary of the journey, noticed the infinite misery to which I was a witness at Lyons, Abbeville, Amiens, &c. and by intelligence I understood that it was still worse at Rouen: the fact could not be otherwise. This effect, which was absolute death, by starving many thousands of families, was a result, that, in my opinion, might have been avoided. It flowed only from carrying things to extremities—from driving the nobility out of the kingdom, and seizing, instead of regulating, the whole regal authority. These violences were not necessary to liberty; they even destroyed true liberty, by giving the government of the kingdom, in too great a degree, to Paris, and to the populace of every town.

The effect of the revolution, to the small proprietors of the kingdom, must, according to the common nature of events, be, *in the end*, remarkably happy; and had the new government adopted any principles of taxation, except those of the *économistes*, establishing at the same time an absolute freedom in the business of inclosure, and in the police of corn, the result would probably have been advantageous, even at this recent period. The committee of imposts * mention (and I doubt not their accuracy) the prosperity of agriculture, in the same page in which they lament the depression of every other branch of the national industry. Upon a moderate calculation, there remained, in the hands of the classes depending on land, on the account of taxes in the years 1789 and 1790, at least 300,000,000 liv; the execution of *corvées* was as lax as the payment of taxes. To this we are to add two years tythe, which I cannot estimate at less than 300,000,000 liv. more. The abolition of all feudal rents, and payments of every sort during those two years, could not be less than 100,000,000 liv. including services. But all these articles, great as they were, amounting to near 800,000,000 liv. were less than the immense sums that came into the hands of the farmers by the high price of corn throughout the year 1789; a price arising almost entirely from Monsr. Necker's fine operations in the corn trade, as it has been proved at large; it is true there is a deduction to be made on account of the unavoidable diminution of consumption in every article of land produce, not essentially necessary to life: every object of luxury, or tending to it, is lessened greatly. But after this discount is allowed, the balance, in favour of the little proprietor farmers, must be very great. The benefit of such a sum being added as it is to the capital of husbandry, needs no explanation. Their agriculture must be invigorated by such wealth—by the freedom enjoyed by its professors: by the destruction of its innumerable shackles; and even by the distresses of other employments, occasioning new and great investments of capital in land: and these leading facts will appear in a clearer light, when the prodigious division of landed property in France is well considered; probably half, perhaps two-thirds,

* *Rapport le 6 Decembre 1790, sur les moyens de pourvoir aux dépenses pour 1791, p. 4.*

of the kingdom are in the possession of little proprietors, who paid quit-rents, and feudal duties, for the spots they farmed. Such men are placed at once in comparative affluence; and as ease is thus acquired by at least half the kingdom, it must not be set down as a point of trifling importance. Should France escape a civil war, she will, in the prosperity of these men, find a resource which politicians at a distance do not calculate. With renters the case is certainly different; for, beyond all doubt, landlords will, sooner or later, avail themselves of these circumstances, by advancing their rents; acting in this respect, as in every other country, is common; but they will find it impossible to deprive the tenantry of a vast advantage, necessarily flowing from their emancipation.

The confusion which has since arisen in the finances, owing almost entirely to the mode of taxation adopted by the assembly, has had the effect of continuing to the present moment (1791), a freedom from all impost to the little proprietors, which, however dreadful its general effects on the national affairs, has tended strongly to enrich this class.

The effects of the revolution, not on any particular class of cultivators, but on agriculture in general, is with me, I must confess, very questionable; I see no benefits flowing, *particularly* to agriculture (liberty applies equally to *all* classes, and is not yet sufficiently established for the protection of *property*), except the case of tythes; but I see the rise of many evils; restrictions and prohibitions on the trade of corn—a varying land-tax—and impeded inclosures, are mischiefs on *principle*, that may have a generative faculty; and will prove infinite drawbacks from the prosperity, which certainly was attainable. It is to be hoped, that the good sense of the assembly will reverse this system by degrees; for, if it is not reversed, AGRICULTURE CANNOT FLOURISH.

The effect of the revolution, on the public revenue, is one great point on which Mons. de Calonne lays considerable stress; and it has been since urged in France, that the ruin of 30,000 families, thrown absolutely out of employment, and consequently out of bread, in the collection of the taxes on salt and tobacco only, has had a powerful influence in spreading universal distress and misery. The public revenue sunk, in one year, 175 millions: this was not a *loss* of that sum; the people to whom assignats were paid on that account lost no more than the discount; the loss, therefore, to the people to whom that revenue was paid, could amount to no more than from 5 to 10 per cent. *. But was it a loss to the miserable subjects who formerly paid those taxes; and who paid them by the sweat of their brows, at the expence of the bread out of their children's mouths, assailed with tyranny, and levied in blood? Do they feel a loss in

* Since this was written, assignats fell, in December 1791, and January 1792, to 34 to 38 per cent. paid in silver; and 42 to 50 paid in gold, arising from great emissions; from the quantity of private paper issued; from forged ones being common; and from the prospect of a war.

having 175 millions in their pockets in 1789, more than they had in 1788? and in possessing another 175 millions more in 1790, and the inheritance in future? Is not such a change ease, wealth, life, and animation to those classes, who, while the pens of political satirists slander all innovations, are every moment reviving, by inheriting from that revolution something which the old government assuredly did not give? The revenue of the clergy may be called the revenue of the public:—those to whom the difference between the present payment of one hundred and forty millions, and the old tythes are a deduction of all revenue, are, beyond doubt, in great distress; but what say the farmers throughout the kingdom, from whom the detestable burthen of those taxes was extorted? Do not they find their culture lightened, their industry freed, their products their own? Go to the aristocratical politician at Paris, or at London, and you hear only of the ruin of France—go to the cottage of the *metayer*, or the house of the farmer, and demand of him what the result has been—there will be but one voice from Calais to Bayonne. If tythes were to be at one stroke abolished in England*, no doubt the clergy would suffer, but would not the agriculture of the kingdom, with every man dependent on it, rise with a vigour never before experienced.

Future Effects.

It would betray no inconsiderable presumption to attempt to predict what will be the event of the revolution now passing in France; I am not so imprudent. But there are considerations that may be offered to the attention of those who love to speculate on future events better than I do. There are three apparent benefits in an aristocracy forming the part of a constitution; first, the fixed, consolidated, and hereditary importance of the great nobility, is, for the most part, a bar to the dangerous pretensions, and illegal views, of a victorious and highly popular king, president, or leader. Assemblies, so elected, as to be swayed absolutely by the opinion of the people, would frequently, under such a prince, be ready to grant him much more than a well constituted aristocratic senate. Secondly, such popular assemblies as I have just described, are sometimes led to adopt decisions too hastily, and too imprudently; and particularly in the case of wars with neighbouring nations; in the free countries, we have known the commonalty have been too apt to call lightly for them. An aristocracy, not *unduly*

* It is an error in France to suppose, that the revenue of the church is small in England. The Royal Society of Agriculture at Paris states that revenue at 210,000l.; it cannot be stated at less than five millions sterling. *Mem. présenté par la S. R. d'Ag. à l'Assemblée Nationale*, 1789, p. 52.—One of the greatest and wisest men we have in England, persists in asserting it to be *much less* than two millions. From very numerous enquiries, which I am still pursuing, I have reason to believe this opinion to be founded on insufficient data.

influenced by the crown, stands like a rock against such phrenzies, and hath a direct interest in the encouragement and support of peaceable maxims. The remark is applicable to many other subjects, in which mature deliberation is wanted to ballast the impetuosity of the people. I always suppose the aristocratic body well constituted upon the basis of a sufficient property, and at the same time no *unlimited* power in the crown, to throw all the property of the kingdom into the same scale, which is the case in England. Thirdly, whatever benefits may arise from the existence of an executive power, distinct from the legislative, must absolutely depend on some intermediate and independent body between the people and the executive power. Every one must grant, that if there be no such body, the people are enabled, when they please, to annihilate the executive authority, —and assign it, as in the case of the long parliament, to committees of their own representatives; or, which is the same thing, they may appear as they did at Versailles, armed before the King, and insist on his consent to any propositions they bring him; in these cases, the seeming advantages derived from a distinct executive power are lost. And it must be obvious, that in such a constitution as *the present* one of France, the kingly office can be put down as easily and as readily, as a secretary can be reprimanded for a false entry in the journals. If a constitution be good, all great changes in it should be esteemed a matter of great difficulty and hazard: it is in bad ones only that alterations should not be looked upon in a formidable light.

That these circumstances may prove advantages in an aristocratical portion of a legislature, there is reason to believe; the inquiry is, whether they be counterbalanced by possible or probable evils. May there not come within this description, the danger of an aristocracy uniting with the crown against the people? that is to say, influencing by weight of property and power, a great mass of the people dependent—against the rest of the people who are independent? Do we not see this to be very much the case in England at this moment? To what other part of our constitution is it imputable that we have been infamously involved in perpetual wars, from which none reap any benefit but that tribe of vermin which thrive most when a nation most declines; contractors, victuallers, paymasters, stock-jobbers, and money-scriveners: a set by whom ministers are surrounded; and in favour of whom whole classes amongst the people are beggared and ruined. Those who will assert a constitution can be good * which

* It ought not to be allowed even tolerable, for this plain reason, such public extravagance engenders taxes to an amount that will sooner or later force the people into resistance, which is always the destruction of a constitution; and surely that must be admitted bad, which carries to the most careless eye the seeds of its own destruction. Two hundred and forty millions of public debt in a century, is in a ratio impossible to be supported; and therefore evidently ruinous.

suffers these things, ought at least to agree, that such an one as would not suffer them would be much better *.

If an aristocracy hath thus its advantages and disadvantages, it is natural to inquire, whether the French nation be likely to establish something of a senate, that shall have the advantages without the evils. If there should be none, no popular representatives will ever be brought, with the consent of their constituents, to give up a power in their own possession and enjoyment. It is experience alone, and long experience, that can satisfy the doubts which every one must entertain on this subject. What can we know, experimentally, of a government which has not stood the brunt of unsuccessful and of successful wars? The English constitution has stood this test, and has been found deficient; or rather, as far as this test can decide any thing, has been proved worthless; since, in a single century, it has involved the nation in a debt of so vast † a magnitude, that every blessing which might otherwise have been perpetuated is put to the stake; so that if the nation do not make some change in its constitution, it is much to be dreaded that the constitution will ruin the nation. Where practice and experience have so utterly failed, it would be vain to reason from theory: and especially on a subject on which a very able writer has seen his own prediction so totally erroneous: "In the monarchical states of Europe, it is highly improbable that any form of properly equal government should be established for many ages; the people, in general, and especially in France, being proud of their monarchs, even when they are oppressed by them ‡."

In regard to the future consequences of this singular revolution, as an example to other nations, there can be no doubt but the spirit which has produced it, will, sooner, or later, spread throughout Europe, according to the different degrees of illumination amongst the common people; and it will prove either mischievous or beneficial, in proportion to the previous steps taken by governments. It is un-

* "The direct power of the King of England," says Mr. Burke, "is considerable. His indirect is great indeed. When was it that a King of England wanted wherewithal to make him respected, courted, or perhaps even feared in every state in Europe?" It is in such passages as these, that this elegant writer lays himself open to the attacks formidable, because just, of men who have not an hundredth part of his talents. Who questions, or can question, the power of a prince that in less than a century has expended above 1000 millions, and involved his people in a debt of 240? The point in debate is not the *existence* of power, but its *excess*. What is the constitution that generates or allows of such expences? The very mischief complained of is here wrought into a merit, and brought in argument to prove that exaggerated power is salutary.

† This debt, and our enormous taxation, are the best answer the National Assembly gives to those who would have had the English government, with all its faults on its head, adopted in France; nor was it without reason said by a popular writer, that a government, formed like the English, obtains more revenue than it could do, either by direct despotism, or in a full state of freedom.

‡ Dr. Priestley's Lectures on Hist. 4to. 1788. p. 3. 317.

questionably

questionably the subject of all others the most interesting to every class, and even to every individual of a modern state; the great line of division, into which the people divides, is, 1st, those that have property; and, 2d, others that have none. The events that have taken place in France, in many respects, have been subversive of property; and have been effected by the lower people, in direct opposition to the nominal legislature; yet their constitution began its establishment with a much greater degree of regularity, by a formal election of representatives, than there is any probability of seeing in other countries. Revolutions will there be blown up from riotous mobs—from the military called out to quell them, but refusing obedience, and joining the insurgents. Such a flame spreading rapidly through a country, must prove more hostile, and more fatal to property, than any thing that has prevailed in France. The probability of such events, every one must allow to be not inconsiderable; the ruin that must attend them cannot be doubted; for they would tend to produce not a National Assembly, and a free constitution, but an universal anarchy and confusion. The first attempt towards a democracy in England would be the common people demanding an admission and voice in the vestries, and voting to themselves whatever rates they thought proper to appropriate; which, in fact, would be an agrarian law. Can there be so much futility in the present governments of Europe, as to suppose, that old principles and maxims will avail any longer? Can such ignorance of the human heart, and such blindness to the natural course of events be found, as the plan of rejecting *all* innovations lest they should lead to greater? There is no government to be found, that does not depend, in the last resort, on a military power; and if that fail them, is not the consequence easily seen? A new policy must either be adopted, or all the governments we know will be swept from their very foundations. This policy must consist, first, in making it the interest, as much as possible, of every class in the state, except those absolutely without property *, to support the established government; and also to render it as palatable, as the security of property will allow, even to these; farther than this none can look, for it is so directly the interest of the people, *without property*, to divide with those *who have it*, that no government can be established, which shall give the poor an equal interest in it with the rich †;—the visible tangible interest of the poor

* The representation of mere population is as gross a violation of sense, reason, and theory, as it is found pernicious in practice; it gives to ignorance to govern knowledge; to uncultivated intellect the lead of intelligence; to savage force the guide of law and justice; and to folly the governance of wisdom. Knowledge, intelligence, information, learning, and wisdom, ought to govern nations; and these are all found to reside most in the middle classes of mankind; weakened by the habits and prejudices of *the great*, and stifled by the ignorance of the vulgar.

† Those who have not attended much to French affairs, might easily mistake the representation of territory and contribution in the French constitution, as something similar to what I contend for—
but

poor (if I may use the expressions), and not the ultimate and remote, which they will never voluntarily regard, is a *pure* democracy, and a consequent division of property, the sure path to anarchy and despotism. The means of making a government respected and beloved are, in England, obvious; taxes must be immensely reduced; assessments on malt, leather, candles, soap, salt, and windows, must be abolished or lightened; the funding system, the parent of taxation, annihilated for ever, by taxing the interest of the public debt—the constitution that admits a debt, carries in its vitals the seeds of its destruction; tythes* and tests abolished; the representation of parliament reformed, and its duration shortened; not to give the people, without property, a predominancy, but to prevent that corruption, in which our debts and taxes have originated; the utter destruction of all monopolies, and, among them, of all charters and corporations; game made property, and belonging to the possessor of one acre, as much as to him who has a thousand; and, lastly, the laws, both criminal and civil, to be thoroughly reformed.—These circumstances include the great evils of the British constitution; if they be remedied, it may enjoy even a Venetian longevity; but if they be allowed, like cancerous humours to prey on the nobler parts of the political system, this boasted fabric may not exist even twenty years. To guard property effectually, and to give permanency to the new system, the militia laws ought all to be repealed. When we see, as in all the monarchies of Europe, the government only armed, despotism is established. When those who have property alone are armed, how secure the people from oppres-

—but nothing is more remote: the number chosen is of little consequence, while persons without property are the electors. Yet Mr. Christie says, vol. i. p. 196. that property is a base on which representation ought to be founded; and it is plain he thinks that property is represented, though the representatives of the property are elected by men that do not possess a shilling! It is not that the proprietors of property should have voices in the election proportioned to their property, but that men who have a direct interest in the plunder or division of property should be kept at a distance from power. Here lies the great difficulty of modern legislation, to secure property, and at the same time to secure freedom to those that have no property. In England there is much of this effected for the small portion of every man's income that is left to him after public plunder is satiated (the poor, the parson, and the king take 50 to 60 per cent. of every man's rent)—but the rest is secure. In America the poor, the parson, and the king take nothing (or next to nothing), and the whole is secure. In France ALL seems to be at the mercy of the populace.

* The exaction of tythes is so absurd and tyrannical an attack on the property of mankind, that it is almost impossible for them to continue in any country in the world half a century longer. To pay a man by force 1000l. a year, for doing by deputy what would be much better done for 100l. is too gross an imposition to be endured. To levy that 1000l. in the most pernicious method that can wound both property and liberty, are circumstances congenial to the tenth century, but not to the eighteenth. Italy, France, and America, have set noble examples for the imitation of mankind; and those countries that do not follow them, will soon be as inferior in cultivation as they are in policy.

tion,

sion?—When those who have no property are armed, how prevent their seizing the property of others?—Perhaps the best method of guarding against these contrary evils, is to embody, in a national militia, all who have property; and, at the same time to allow arms (unembodied) to all citizens indiscriminately: we see in the case of Berne, that the people being armed, keeps an aristocracy in such order, that great oppressions are unknown. An army was always dangerous; and, in the probable state of Europe, it may be doubly so; discipline preserved, it cemented despotism; undisciplined, it may unite with the people of no property, and produce anarchy and ruin. There seems to be no sufficient guard upon it, but a national militia, formed of every man that possesses a certain degree of property, rank and file as well as officers *. Such a force, in this island, would probably amount to above 100,000 men; and would be amply sufficient for repressing all those riots, whose object might be, immediately or ultimately, the democratic mischief of transferring property †. This for a free govern-

* The late riots at Birmingham ought to convince every man, who looks to the preservation of peace, that a *militia of property* is absolutely necessary; had it existed at that town, no such infamous transactions could have taken place, to the disgrace of the age and nation. Those riots may convince us how insecure our property really is in England, and how very imperfect that POLITICAL SYSTEM, which could, twice in ten years, see two of the greatest towns in England at the mercy of a vile mob. The military must, in relation to the greater part of the kingdom, be always at a distance; but a militia is on the spot, and easy to be collected, by previous regulations, at a moment's warning.

† The class of writers who wish to spread the taste of revolutions, and make them every where the *order of the day*, affect to confound the governments of France and America, as if established on the same principles; if so, it is a remarkable fact that the result should, to appearance, turn out so differently: but a little examination will convince us, that there is scarcely any thing in common between those governments, except the general principle of being free. In France, the populace are electors, and to so low a degree that the exclusions are of little account; and the qualifications for a seat in the provincial assemblies, and in the national one, are so low that the whole chain may be completed, from the first elector to the legislator, without a single link of what merits the name of property. The very reverse is the case in America, there is not a single state in which voters must not have a qualification of property: in Massachusetts and New Hampshire, a freehold of 3l. a year, or other estate of 60l. value: Connecticut is a country of substantial freeholders, and the old government remains: in New-York, electors of the senate must have a property of 100l. free from debts; and those of the assembly, freeholds of 40s. a year, *rated and paying taxes*: in Pennsylvania, payment of taxes is necessary: in Maryland, the possession of 50 acres of land, or other estate worth 30l. in Virginia, 25 cultivated acres, with a house on it: in North-Carolina, for the senate 50 acres, and for the assembly payment of taxes: and in all the states there are qualifications much more considerable, necessary for being eligible to be elected. In general it should be remembered, that taxes being so very few, the qualification of paying them excludes vastly more voters than a similar regulation in Europe. In constituting the legislatures also, the states all have two houses, except Pennsylvania. And Congress itself meets in the same form. Thus a ready explanation is found of that order and regularity, and security of property, which strikes every eye in America; a contrast to the spectacle which

France

government:—despotic ones, that would wish to escape destruction, must emancipate their subjects, because no military conformation can long secure the obedience of ill treated slaves; and while such governments are giving to their people a constitution worth preserving, they should, by an absolute renunciation of all the views of conquest, make a small army as efficient for good purposes, as a large force for ambitious ones; this new-modelled military should consist, rank and file, of men interested in the preservation of property and order: were this army to consist merely of nobility, it would form a military aristocracy, as dangerous to the prince as to the people; it should be composed, indiscriminately, of individuals, drawn from all classes, but possessing a given property.—A good government, thus supported, may be durable; bad ones will be shivered to pieces by the new spirit that ferments in Europe:

The candid reader will, I trust, see, that in whatever I have ventured to advance on so critical a subject as this great and unexampled revolution, I have assigned the merit I think due to it, *which is the destruction of the old government*, and not the establishment of the new. All that I saw, and much that I heard, in France, gave me the clearest conviction, that a change was necessary for the happiness of the people; a change, that should limit the royal authority; that should restrain the feudal tyranny of the nobility; that should reduce the church to the level of good citizens; that should correct the abuses of finance; that should give purity to the

France has exhibited, where confusion of every sort has operated, in which property is very far from safe; in which the populace legislate and then execute, not laws of their representatives, but of their own ambulatory wills; in which, at this moment (March 1792), they are a scene of anarchy, with every sign of a civil war commencing. These two great experiments, as far as they have gone, ought to pour conviction in every mind, that order and property never can be safe if the right of election is personal, instead of being attached to property: and whenever propositions for the reformation of our representation shall be seriously considered, which is certainly necessary, nothing ought to be in contemplation but taking power from the crown and the aristocracy—not to give it to the mob, but to the middle classes of moderate fortune. The proprietor of an estate of 50l. a year is as much interested, in the preservation of order and of property, as the possessor of fifty thousand; but the people without property have a direct and positive interest in public confusion, and the consequent division of that property, of which they are destitute. Hence the necessity, a pressing one in the present moment, of a militia rank and file, of property; the essential counterpoise to assemblies in alehouse kitchens, clubbing their pence to have the *Rights of Man* read to them, by which should be understood (in Europe, not in America) the RIGHT TO BLUNDER. Let the state of France at present be coolly considered, and it will be found to originate absolutely in population, without property being represented; it exhibits scenes such as can never take place in America. See the National Assembly of a great empire, at the crisis of its fate, listening to the harangues of the Paris populace, the female populace of St. Antoine, and the president formally answering and flattering them! Will such spectacles ever be seen in the American Congress? Can that be a well constituted government, in which the most precious moments are so consumed? The place of assembling (Paris) is alone sufficient to endanger the constitution.

administration of justice ; and that should place the people in a state of ease, and give them weight enough to secure this blessing. Thus far I must suppose every friend of mankind agreed. But whether, in order to effect thus much, all France were to be overthrown, ranks annihilated, property attacked, the monarchy abolished, and the king and royal family trampled upon ; and, above all the rest, the whole effect of the revolution, good or bad, put on the issue of a conduct which, to speak in the mildest language, made a civil war probable :—this is a question absolutely distinct. In my private opinion, these extremities were not necessary ; France might have been free without violence ; a necessitous court, a weak ministry, and a timid prince, could have refused nothing to the demands of the states, essential to public happiness. The power of the purse would have done all that ought to have been done. The weight of the commons would have been predominant ; but it would have had checks and a controul, without which *power* is not CONSTITUTION, but *tyranny*.—While, however, I thus venture to think that the revolution might have been accomplished upon better principles, because probably more durable ones, I do not therefore assign the first National Assembly in the gross to that total condemnation, they have received from some very intemperate pens, and for this plain reason, because it is certain that they have not done much which was not called for by the people.

Before the revolution is condemned in the gross, it should be considered what extent of liberty was demanded by the three orders in their *cabiers* ; and this in particular is necessary, since those very *cabiers* are quoted to shew the mischievous proceedings of the National Assembly. Here are a few of the ameliorations demanded ; to have the trial by jury, and the *habeas corpus* of England * ; to deliberate by head, and not by order, demanded by the nobility themselves † ; to declare all taxes illegal and suppressed—but to grant them anew for a year ‡ ; to abolish for ever the capitaineries || ; to establish a *caisse nationale séparée inaccessible à toute influence du pouvoir exécutif* § ; that all the intendants should be suppressed ¶ ; that no treaties of commerce should be made but with the consent of the states ¶ : that the orders of begging monks be suppressed **: that all monks be suppressed, and their goods and estates sold †† : that tythes be for ever suppressed ‡‡ : that all feudal rights, duties, payments, and services be abolished ||| : that salaries (*traitement pécuniaire*) be paid to the depu-

* Nob. Auxois, p. 23. Artois, p. 13. T. Etat de Peronne, p. 15. Nob. Dauphiné, p. 119.

† Nob. Touraine, p. 4. Nob. Senlis, p. 46. Nob. Pays de Labour, p. 3. Nob. Quésnoy, p. 6. Nob. Sens, p. 3. Nob. Thimerais, p. 3. Clergé du Bourbonnois, p. 6. Clergé du Bas-Limousin, p. 10.

‡ Too numerous to quote, of both Nobility and Tiers. || Many ; Nobility as well as Tiers.

§ Nob. Sezanne, p. 14. T. Etat Metz, p. 42. T. Etat de Auvergne, p. 9. T. Etat de Riom, p. 23.

¶ Nob. Nivernois, p. 25. ** Nob. Bas Limousin, p. 12. †† T. Etat du Haut Vivarais, p. 18. Nob. Rheims, p. 16. Nob. Auxerre, p. 41. ‡‡ Nob. Toulon, p. 18. ||| Too many to quote.

ties * : that the permanence of the National Assembly is a necessary part of its existence † : that the Bastile be demolished ‡ : that the duties of *aides*, on wine, brandy, tobacco, salt, leather, paper, iron, oil, and soap, be suppressed || : that the apanages be abolished § : that the domains of the king be alienated ¶ : that the king's studs (*baras*), be suppressed ** : that the pay of the soldiers be augmented †† : that the kingdom be divided into districts, and the elections proportioned to population and to contributions ‡‡ : that all citizens paying a determinate quota of taxes vote in the parochial assemblies ||| : that it is indispensable in the states-general to consult the Rights of Man §§ : that the deputies shall accept of no place, pension, grace, or favour ¶¶.

From this detail of the instructions given by the nation, I will not assert that every thing which the National Assembly has decreed is justifiable; but it may be very fairly concluded, that much the greater part of their arrears, and many that have been the most violently arraigned, are here expressly demanded. To reply that these demands are not those of the nation at large, but of particular bodies only, is very wide from the argument; especially as the most virulent enemies of the revolution, and particularly Mess. Burke and De Calonne, have, from these *cabiers*, deduced such conclusions as suited their purpose; and if they are made authority for condemning the transactions in that kingdom, they certainly are equal authority for supporting those transactions. I shall make but one observation on these demands. The assemblies that drew them up, most certainly never demanded, in express terms, the abolition of the monarchy, or the transfer of all the regal authority to the deputies; but let it be coolly considered, what sort of a monarchy must necessarily remain, while an assembly is permanent, with power to abolish tythes; to suppress the intendants; not only to vote, but to keep the public money: to alienate the king's domains; and to suppress his studs: to abolish the *capitaineries*, and destroy the Bastile:—the assembly that is called upon to do all this, is plainly meant to be a body *solely* possessing the legislative authority: it is evidently not meant to *petition the king*

* *Nob. Nemery en Lorain*, p. 10. † *Nob. Mantes & Meulan*, p. 16. *Previns & Monteraux*, art. 1. *Rennes*, art. 19. ‡ *Nob. Paris*, p. 14. || *Nob. Vitry le François*, MS. *Nob. Lyon*, p. 16. *Nob. Bugey*, p. 28. *Nob. Paris*, p. 22. § *Nob. Ponthieu*, p. 32. *Nob. Chartres*, p. 19. *Nob. Auxerre*, art. 74. ¶ *Nob. Bugey*, p. 11. *Nob. Montargis*, p. 18. *Nob. Paris*, p. 16. *Nob. Bourbonnois*, p. 12. *Nob. Nancy*, p. 23. *Nob. Angoumois*, p. 20. *Nob. Pays de Labour*, fol. 9. ** *Nob. Beauvois*, p. 18. *Nob. Troyes*, p. 25. †† *Nob. Limoges*, p. 31. ‡‡ *T. Etat de Lyon*, p. 7. *Nismes*, p. 13. *Cotentin*, art. 7. ||| *T. Etat Rennes*, art. 15. §§ *T. Etat Nismes*, p. 11.

¶¶ *T. Etat Pont a Mousson*, p. 17. Mr. Burke says, "When the several orders, in their several bailliages, had met in the year 1789, to chuse and instruct their representatives, they were the people of France; whilst they were in that state, in no one of their instructions did they charge, or ever hint at any of those things which have drawn upon the usurping assembly the detestation of the rational part of mankind."

to do it; because they would have used, in this case, the form of expression so common in other parts of the *cabiers*, *that his majesty will have the goodness, &c.*

The result of the whole inquiry, cannot but induce temperate men to conclude, that the abolition of tythe, of feudal services and payments, of the *gabelle* or salt-tax, of that on tobacco, of the *entrees*, of all excises on manufactures, and of all duties on transit, of the infamous proceedings in the old courts of justice, of the despotic practices of the old monarchy, of the militia regulations, of the monasteries and nunneries, and of numberless other abuses; I say, that temperate men must conclude, that the advantages derived to the nation are of the very first importance, and such as must inevitably secure to it, as long as they continue, an uncommon degree of prosperity. The men who deny the benefit of such events, must have something sinister in their views, or *muddy in their understandings*. On the other hand, the extensive and unnecessary ruin brought on so many thousands of families, of all descriptions, by violence, plunder, terror, and injustice, to an amount that is shewn in the utter want of the precious metals, the stagnation of industry, and the poverty and misery found amongst many, is an evil of too great a magnitude to be palliated. The nourishment of the most pernicious cancer in the state, public credit; the deluge of paper money; the violent and frivolous extinction of rank*; the new system of taxation, apparently so hurtful to landed property; and a restricted corn trade; all these are great deductions from public felicity, and weigh the heavier in the scale, because unnecessary to effect the revolution. Of the nature and durability of the constitution established, prudent men will not be eager to prophesy: it is a new experiment†, and cannot be tried or examined

* It is so because the inequality remains as great as if titles had remained; but built on its worst basis, wealth. The nobility were bad, but not so bad as Mr. Christie makes them; they did *not* wait till the *Etats Generaux* before they agreed to renounce their pecuniary privileges, *Letters on the Rev. of France*, vol. i. p. 74. The first meeting of the states was May 5, 1789; but the nobility assembled at the Louvre, December 20, 1788, addressed the king, declaring that intention.

† After all that has been said of late years, on the subject of constitutions and governments by various writers in England, but more especially in France, one circumstance must strike any attentive reader; it is, that none of the writers who have pushed the most forward in favour of new systems, have said any thing to convince the unprejudiced part of mankind, that experiment is not as necessary a means of knowledge in relation to government, as in agriculture, or any other branch of natural philosophy. Much has been said in favour of the American government, and I believe with perfect justice, *reasoning as far as the experiment extends*; but it is fair to consider it as an imperfect experiment, extending no further than the energy of personal virtue, seconded by the moderation attendant on a circulation not remarkably active. We learn, by Mr. Payne, that General Washington accepted no salary as commander of their troops, nor any as president of their legislature—an instance that does honour to their government, their country, and to human nature; but it may be doubted, whether any such instances will occur two hundred years hence? The exports of the United States now amount to 20 millions of dollars; when they amount to 500 millions, when great wealth,

examined on old ideas; but the EFFECTS, good and bad, here arranged, in opposition to each other, are visible to every eye; the advantages are recognized; the evils are felt. On these circumstances we are competent to reason *.

1792.

IT may afford the reader some satisfaction to note a few circumstances of the state of France at the opening of 1792, which I draw from the correspondence of some friends, on whose accuracy I can rely.

Agriculture.—Small proprietors, who farm their own lands, are in a very improved and easy situation: renters are proportionally so, to the degree in which their landlords have not been able to acquire in new rents, the payments from which the land has been freed. Owners of meadows, woods, and a variety of articles for which no tythe was paid before, gain much less than others whose property used to be subject to that burthen. In regard to the payment of rent, there is a distinction between the north and south of the Loire; in the former, rents continue to be paid; but to the south, many landlords have been unable to receive a penny; and here a difference is observable; absentees, who were not beloved, or whose agents are disliked, are in an ill situation; but others, who reside, or who, though absent, are beloved, are paid proportionally to the ability of the *metayer*, which species of tenant is chiefly found south of the Loire. The last crop (of 1791) is said to have been short; in a good year, in Picardy, 40 sheaves gave a *septier* of wheat, of 240 lb.; but now it takes 50 to 60. This circumstance, however, cannot be general, as the price plainly proves; for January 7th, 1792, price at Paris of wheat was 22 to 28 liv. with assignats at 36 per cent. discount, a remarkable proof, that the most depreciated paper cur-

wealth, vast cities, a rapid circulation, and, by consequence, immense private fortunes are formed, will such spectacles be found. Will their government then be as faultless as it appears at present? It may. Probably it will still be found excellent; but we have no conviction, no proof; it is in the womb of time—THE EXPERIMENT IS NOT MADE. Such remarks, however, ought always to be accompanied with the admission, that the British government has been experimented.—With what result?—Let a debt of 240 millions—let seven years war—let Bengal and Gibraltar—let 30 millions sterling of national burthens, taxes, rates, tythes, and monopolies—let these answer—

* The gross abuse which has been thrown on the French nation, and particularly on their assemblies, in certain pamphlets, and without interruption, in several of our newspapers, ought to be deprecated by every man who feels for the future interests of this country. It is in some instances carried to so scandalous an excess, that we must necessarily give extreme disgust to thousands of people, who may hereafter have an ample opportunity to vote and act under the influence of impressions unfavourable towards a country, that, unprovoked, has loaded them with so much contumely; for a nation groaning under a debt of 240 millions, that deadens the very idea of future energy, this seems, to use the mildest language, to be at least very imprudent.

rency will answer every purpose for objects of physical necessity, and daily consumption. The discount on this paper, is greater than ever was foretold, by those who predicted an enormous rise of all the necessaries of life; a proof how new the science of politics is, and how little able the most ingenious men are to foretel the effects of any specified event. The sale of the national estates has been of late very slow, which is a strange circumstance, since the rapidity of their transfer ought to have been proportioned to the discount upon assignats, for an obvious reason; for, while land is to be acquired with money, the more depreciated paper is, the greater the benefit to the purchaser. While the sale of the estates lasted with any degree of briskness, the common price, of such as have come to my knowledge, was 20 to 30, and even more years purchase; at which rate the advantages attending investments may be great.

Commerce and manufactures.—The result of the vast discount upon assignats has, in relation to the national industry, been almost contrary to what many persons, not ill informed, expected. Early in the confusion of the revolution, nothing suffered so severely as manufactures; but I am now (1792) informed, that there is much more motion and employment in them than some time past, when the general aspect of affairs was less alarming. The very circumstance which, according to common ideas, should have continued their depression, has most unaccountably revived them in some measure; I mean the depreciation of the assignats. Paper currency has been at so low a pitch, that every species of goods has been preferred in payments; master manufacturers paying their workmen, &c. in assignats, by which bread is purchased at a price proportioned to the crop, can sell the product of that labour to such an advantage, as to create demand enough to animate their business: a most curious political combination, which seems to shew, that in circumstances where evils are of the most alarming tendency, there is a re-action, an under-current, that works against the apparent tide, and brings relief, even from the very nature of the misfortune. Combine this with the point of depression of England, in all her wars, as explained with such talents by the ingenious Mr. Chalmers, and something of a similarity will strike the reflecting reader. The loss by the depression of assignats has not been by any interior transactions, but by those with foreign powers. In consequence of it, the course of exchange rose at last so high, that the loss to the kingdom has been great, but by no means so great as some have imagined, who supposed the intercourse to be moving in the same ratio as in preceding periods. But this is no light error: the evil of exchange, like all other political evils, corrects itself; when it is very much against a people, they necessarily lessen their consumption of foreign commodities; and on the contrary, foreign nations consume *theirs* very freely, because so easily paid for. Through the month of January, 1792, the course of exchange between us and Paris, has been about 18

on an average; reckoning the par at 30 (which, however, is not exact), here is 40 per cent. against France; deduct 36 for the discount on assignats, and this apparent enormity of evil is reduced to 4 per cent. Through the month of January, 1791, the course was $25\frac{1}{2}$; this was 15 per cent. disadvantage, and deducting 5 for the discount on assignats, the real disadvantage was 10. Thus the exchange in January, 1792, is 6 per cent. more favourable to France than in 1791; a remark, however, which must not be extended to any other case, and touches not on the internal mischiefs of a depreciated currency. It seems to shew, that the evils of their situation, so little understood by the generality of people here, are correcting themselves, relative to foreigners, through the operation of the causes I have mentioned. It is at the same time to be remarked, that while the price of corn, and other things, in which there is no competition by foreigners, rises merely on account of a scarcity, real or apprehensive; at the same time, every thing bought by foreigners, or which can be bought by them, has risen greatly; for instance, the cloth of Abbeville, a French commodity, has risen from 30 liv. to 40 liv. the aulne; and copper, a foreign commodity, has increased, it is asserted, in the petition of the Norman manufactures to the National Assembly, 70 per cent. Such a fabric may suffer; but if their pins sell proportionably with other things, the evil, it must be admitted, tends to correct itself.

Finances.—The prominent feature is the immensity of the debt, which increases every hour. That which bears interest may be about 5,000,000,000 liv.; and assignats, or the debt not bearing interest, may be grossly estimated at 1,500,000,000 liv.; in all 6,500,000,000 liv. or 284,375,000l. sterling, a debt of such enormity, that nothing but the most regular, and well paid revenue, could enable the kingdom to support it. The annual *deficit* may be reckoned about 250,000,000 liv. *at present*, but improveable by a better collection of the revenue. The following is the account for the month of February 1790:

Recette,	20,000,000
Depenses extraordinaire de 1792,	12,000,000
Id. pour 1791,	2,000,000
Avances au de part de Paris,	1,000,000
Deficit,	43,000,000
	58,000,000

I am afraid that any attempt to support such infinite burthens must continue to deluge the kingdom with paper, till, like congress dollars in America, circulation ceases altogether. There seems to be no remedy but a bankruptcy, which is the best, easiest, and most beneficial measure to the nation, that can be embraced; it is also the most just and the most honourable; all shifting expedients are, in fact, more mischievous to the people, and yet leave government as deeply involved

involved, as if no recourse had been made to them. If the *milice bourgeoise* of Paris is so interested in the funds, as to render this too dangerous, there does not appear to be any other rule of conduct, than one great and last appeal to the nation, declaring, that they must either DESTROY PUBLIC CREDIT, OR BE DESTROYED BY IT. If the National Assembly have not virtue and courage enough thus to extricate France, she must at all events, remain, however free, in a state of political debility.

The impossibility of levying the *économistes* land-tax, is found in France to be as great in practice as the principles of it were absurd in theory. I am informed (February, 1792), that the confusion arising from this cause, in almost every part of the kingdom, is great *. The tax of 300 millions, laid on the *rental* of France, would not be more than 2s. 6d. in the pound; too great a burthen on just political principles, but not a very oppressive one, had it been once fairly assessed, and never afterwards varied. But, by pursuing the jargon of the *produit net*; and making it variable, instead of fixed, every species of inconvenience and uncertainty has arisen. The assembly divided the total among the departments; the departments the *quotas* among the districts; the districts among the municipalities; and the municipalities assembled for the assessment of individuals: the same decree that fixed the tax at 300 millions, limited it also not to exceed one-fifth of the *produit net*; every man had therefore a power to reject any assessment that exceeded that proportion; the consequence was, the total assigned to the municipalities was scarcely any where to be found, but upon large farms, let at a money-rent in the north of France; among the small proprietors of a few acres, which spread over so large a part of the kingdom, they all screened themselves under definitions, of what the *produit net* meant; and the result was, that the month of December, which ought to have produced 40 millions, really produced but 14. So practicable has this visionary nonsense of the *produit net* proved, under the dispensations of a mere democracy, though acting *nominally* † by representatives. The fact has been, that this ill conceived and ill laid land-tax, which, under a different management, and under the orderly government of the *settled* part of America, might have been effectively productive, has been so contrived, that it never will, and never can produce what it was estimated at in France. The people, without property, have a direct interest in seconding the refusals of others to pay, that are in the lowest classes of property, and who can really ill afford it; one great objection to all land-taxes, where possessions are much divided. With power in such hands,

* The inequalities and the numerous injustices which have slipped into the valuations of landed property, excite a general discontent against the new system of taxation.—*Speech of the President of the Dist. of Tonnerre at the bar.*

† Whether nominally, or really, is not of consequence, if *effective* qualifications of property be not, at every step, the guard, as in the American constitution.

the refusal is effective, and the national treasury is empty. But supposing such enormous difficulties overcome, and these little properties valued and taxed on some practicable plan, from that moment there must be a new valuation every year; for, if one has wealth enough to improve beyond the capacity of the rest, they immediately shift a proportion of their tax on him; and this has accordingly happened, early as it is in the day, and indeed is inherent in the nature of the tax, as promulgated by the assembly*. Thus annual assessments, annual confusion, annual quarrels, and heart-burnings, and annual oppression, must be the consequence; and all this, because a plain, simple, and practicable mode of assessment was not laid down by the legislature itself, instead of leaving it to be debated and fought through 500 legislatures, on the plan, purely ideal and theoretical, of the *œconomistes*!

Police of Corn.—The National Assembly has been of late repeatedly employed in receiving complaints from various departments, relative to the scarcity and high price of corn, and debates on it arise, and votes pass, which are printed, to satisfy the people that all precautions are taken to prevent exportation. Such a conduct shews, that they tread in the steps of Monsr. Necker, and that they consequently may expect, with a crop but slightly deficient, to see a famine. In the *Gazette Nationale*, of March 6, 1792, I read, in the journal of the Assembly, *Inquietudes—précautions prises—commissaires envoyés—veiller à la subsistance du peuple—fonds pour acheter des grains chez l'étranger—dix millions—&c.* Now this is precisely the blind and infatuated conduct of Monsr. Necker. If these steps are necessary to be taken (which is impossible), why talk of and print them? Why alarm the people, by shewing yourselves alarmed? Forty-five millions loss, in the hands of M. Necker, purchased not three days corn for France; ten millions will not purchase one day's consumption! but the report and parade of it will do more mischief than the loss of five times the quantity: without being in France, I am clear, and can rely enough upon principles to know, that these measures will RAISE, not sink the price. One of the many instances in legislation, that proves the immense difference (regarding the cases of France and the United States) between a representation of mere population, and one of property! *M—pour prévenir les inquietudes qui pourraient arriver l'année prochaine et les suivantes, l'assemblée doit s'occuper dès ce moment d'un plan général sur les substances*—There is but one plan, ABSOLUTE FREEDOM; and you will shew, by accepting or rejecting it, what class of the people it is that you represent. Proclaim a free trade, and from that moment ordain that an inkstand be crammed instantly into the throat of the first member that pronounces the word corn.

* “ Aussitôt que les opérations préliminaires seront terminées les officiers municipaux et les commissaires adjoints feront, en leur ame et conscience l'évaluation du revenu net des différentes propriétés foncières de la communauté section par section. *Journal des Etats Gen.* tom. xvi. p. 510.

Prohibition of the Export of the raw Materials of Manufactures.—The last information I have had from France is a confirmation of the intelligence our newspapers gave, that the National Assembly had ordered a decree to be prepared for this prohibition. It seems that the master manufacturers of various towns, taking advantage of the great decline of the national fabrics, made heavy complaints to the National Assembly; and, among other means of redress, demanded a prohibition of the export of cotton, silk, wool, leather, and in general, of all raw materials. It was strenuously opposed by a few men, better acquainted than the common mass with political principles, but in vain; and orders were given to prepare the decree, which I am assured will pass. As I have, in various papers in the *Annals of Agriculture*, entered much at large into this question, I shall only mention a few circumstances here, to convince France, if possible, of the mischievous and most pernicious tendency of such a system, which will be attended with events little thought of at present in that kingdom. As it is idle to have recourse to reasoning, when facts are at hand, it is only necessary to describe the effect of a similar prohibition in the case of wool in England:—1st, The price is sunk by it 50 per cent. below that of all the countries around us, which, as is proved by documents unquestionable, amounts to a land-tax of between three and four millions sterling; being so much taken from land and given to manufactures. 2d, Not to make them flourish; for a second curious fact is, that of all the great fabrics of England that of wool is *least* prosperous, and has been regularly *most* complaining, of which the proofs are before the public; the policy therefore has failed; and because it fails in England, it is going to be adopted in France. The home monopoly of wool gives to the manufacturers so great a profit, that they are not solicitous about any extension of their trade beyond the home product; and to this it is owing that no foreign wool, Spanish alone excepted (which is not produced here), is imported into England. The same thing will happen in France; the home-price will fall; the landed interest will be *robbed*; and the manufacturer, tasting the sweets of monopoly, will no longer import as before: the fabric at large will receive no increase; and all the effect will be, to give the master manufacturer a great profit on a small trade: he will gain, but the nation will lose. 3d, The most flourishing manufacture of England is that of cotton, of which the manufacturer is so far from having a monopoly, that $\frac{1}{2}$ ths of the material are imported under a duty, and our own exportable duty free. The next (possibly the first) is that of hardware; English iron is exported duty free, and the import of foreign pays 2l. 16s. 2d. a ton; English coals exported in vast quantities. Glass exhibits the same spectacle; English kelp exportable duty free, and 16s. 6d. a ton on foreign; raw silk pays 3s. a lb. on import; export of British hemp and flax undressed is free, foreign pays a duty on import; British rags, for making paper,

paper, exportable duty free; unwrought tin, lead, and copper all exportable either free or under a slight duty. The immense progress made by these manufactures, particularly hardware, cotton, glass, flax, and earthen-ware, another in which no monopoly of material can exist, is known to all Europe; they are among the greatest fabrics in the world, and have risen rapidly; but note (for it merits the attention of France), that wool has experienced no such rise *. Our policy in wool stands on fact, therefore convicted of rottenness; and this is precisely the policy which the new government of France copies, and extends to every raw material! 4th, The free trade in raw materials is necessary, like the free trade in corn, not to send those materials abroad, but to secure their production at home; and lowering the price, by giving a monopoly to the buyer, is not the way to encourage farmers to produce. 5th, France imports silk and wool to the amount of 50 or 60 millions a year, and exports none, or next to none; why prohibit an export, which in settled times does not take place? At the present moment, the export either takes place, or it does *not* take place; if the latter, why prohibit a trade which has no existence? If it does take place, it proves that the manufacturers cannot buy it as heretofore: is that a reason why the farmers should not produce it? Your manufacturers cannot buy, and you will not let foreigners; what is that but telling your husband-men that they shall not produce? Why then do the manufacturers ask this favour? They are cunning: they very well know why: they have the same view as their brethren in England—solely that of *SINKING THE PRICE*, and thereby putting money in their own pockets, at the expence of the landed interest! 6th, All the towns of France contain but six millions of people; the manufacturing towns not two millions: why are twenty millions in the country to be cheated out of their property, in order to favour one-tenth of that number in towns? 7th, In various passages of these travels, I have shewn the wretched state of French agriculture, for want of more sheep; the new system is a curious way to effect an increase—*by lowering the profit of keeping them*. 8th, The French manufacturers, under the *old* system of *freedom*, bought raw materials from other nations, to the amount of several millions, besides working up all the produce of France; if sinking the price be not their object, what is? Can they desire to do more than this? If under their new government their fabrics do not flourish as under the old one, is that a reason for prohibition and restriction, for robbery and plunder of the landed interest, to make good their own losses? And if such a demand is good logic in a manufacturer's counting-house, is that a reason for its being received in a NATIONAL ASSEMBLY!!

One of the most curious enquiries that can be made by a traveller, is to endea-

* Exports 1757, 4,758,095l. In 1767, 4,277,462. In 1777, 3,743,537l. In 1787, 3,687,795l. See this subject fully examined, *Annals of Agriculture*, vol. x. p. 235.

your to ascertain how much per cent. a capital invested in land, and in farming-stock, will return for cultivation in different countries; no person, according to my knowledge, has attempted to explain this very important but difficult problem. The price of land, the interest of money, the wages of labour, the rates of all sorts of products, and the amount of taxes, must be calculated with some degree of precision, in order to analyse this combination. I have for many years attempted to gain information on this curious point, concerning various countries. If a man in England buys land rented at 12s. an acre, at thirty years purchase, and cultivates it himself, making five rents, he will not make more than from $4\frac{1}{2}$ to 5 per cent. and at most 6, speaking of general culture, and not estimating singular spots or circumstances, and including the capital invested in both land and stock. I learn, from the correspondence of the best farmer, and the greatest character the new world has produced, certain circumstances, which enable me to assert, with confidence, that money invested on the same principles, in the middle states of North America, will yield considerably more than double the return in England, and in many instances the treble of it. To compare France with these two cases, is very difficult:—had the National Assembly done for the agriculture of the kingdom what France had a right to expect from FREEDOM, the account would have been advantageous. For buying at 30 years purchase, stocking the same as in England, and reckoning products 6 per cent. lower in price (about the fact), the total capital would have paid from $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent.; land-tax reckoned at 3s. in the pound, which is the proportion of the total tax to the rental of the kingdom *. It is true, that the course of exchange would make an enormous difference, for when exchange is at 15, this ratio per cent. instead of $5\frac{1}{2}$ becomes 11, if the capital is remitted from Britain: but as that immense loss (50 per cent.) on the exchange of France, arises from the political state of the kingdom, the same circumstances which cause it, would be estimated at so much hazard and danger. But bring to account the operations of the National Assembly, relating to the non-inclosure of commons; the land-tax, variable with improvements (an article sufficient to stifle the thoughts of such a thing); the export of corn at an end; the transport every where impeded; and your grana-

* But this land-tax is variable, and therefore impossible to estimate accurately; if you remain no better farmers than your French neighbours, *it is so much*; but if you improve, *you are raised, and they are sunk*; all that has, and can be said against tythes, bears with equal force against such a tax. And though this imposition cannot go by the present law beyond 4s. in the pound, it would be very easy to shew, by a plain calculation, that 4s. in the pound, *rising with improvement*, is a tax impossible to be borne by one who improves; and, consequently, that is a direct tax on improvement; and it is a tax in the very worst form, since the power to lay and enforce it, is not in the government of the kingdom, but in the municipal government of the parish. Your neighbour, with whom you may be on ill terms, has the power to tax you; no such private heart-burnings and tyranny are found in excises.

ries burnt and plundered at the pleasure of the populace, if they do not like the price ; and, above all, the prohibition of the export of all materials of manufactures, as wool, &c. and it is sufficiently clear, that America offers a vastly more eligible field for the investment of capital in land than France does ; a proof that the measures of the National Assembly have been ill-judged, ill-advised, and unpolitical : I had serious thoughts of settling in that kingdom, in order to farm there ; but the two measures adopted, of a variable land-tax, and a prohibition of the export of wool, damped my hopes, ardent as they were, that I might have breathed that fine climate, free from the extortions of a government, stupid in this respect as that of England. It is, however, plain enough, that America is the only country that affords an adequate profit, and in which a man, who calculates with intelligence and precision, can think of investing his capital. How different would this have been, had the National Assembly conducted themselves on principles directly contrary ; had they avoided all land-taxes * ; had they preserved the free corn-trade, a trade of import more than of export ; had they been silent upon inclosures ; and done nothing in relation to raw materials, the profit of investments would have been higher in France than in America, or any country in the world, and immense capitals would have flowed into the kingdom from every part of Europe : scarcity and famine would not have been heard of, and the national wealth would have been equal to all the exigencies of the period.

* To have avoided land-taxes, might very easily have been made a most popular measure, in a kingdom so divided into little properties as France is. No tax is so heavy upon a small proprietor ; and the *economistes* might have foreseen what has happened, that such little democratic owners would not pay the tax ; but taxes on consumption, laid *as in England*, and not in the infamous methods of the old government of France, would have been paid by them in a light proportion, without knowing it ; but the *economistes*, to be consistent with their old pernicious doctrines, took every step to make all, except land-taxes, unpopular ; and the people were ignorant enough to be deceived into the opinion, that it was better to pay a tax on the bread put into their childrens mouths—and, what is worse, on the land which ought, but does not, produce that bread, than to pay an excise on tobacco and salt ; better to pay a tax which is demanded equally, whether they have or have not the money to pay it, than a duty which, mingled with the price of a luxury, is paid in the easiest mode, and at the most convenient moment. In the writings of the *economistes*, you hear of a free corn trade, and free export of every thing, being the recompence for a land-tax ; but see their actions in power—they impose the burthen, and forget the recompense !

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TRAVELS,

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THE SECOND EDITION.

VOL. II.

By ARTHUR YOUNG, Esq. F.R.S.

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TRAVELS, &c.

CHAP. X.

Vines.

THE number of notes I took, in most of the provinces of the kingdom, relative to the culture of vineyards, was not inconsiderable; but the difficulty of reducing the infinite variety of French measures, of land and liquids, to a common standard, added to an unavoidable uncertainty in the information itself, renders this the most perplexing inquiry that can be conceived. It was an object to ascertain the value given to the soil by this culture; the amount of the annual produce; and the degree of profit attending it; inquiries not undeserving the attention even of politicians, as the chief interests of a country depend, in some measure, on such points being well understood. Now there is scarcely any product so variable as that of wine. Corn lands and meadow have their bad and their good years, but they always yield something, and the average produce is rarely far removed from that of any particular year. With vines the difference is enormous; this year they yield nothing; in another, perhaps casks are wanted to contain the exuberant produce of the vintage; now the price is extravagantly high; and again so low, as to menace with poverty all who are concerned in it. Under such variations, the ideas even of proprietors, who live by the culture, are not often correct, in relation to the *medium* of any circumstance: nor is it always easy to bring individuals to regard rather the average of a district, than the particular one of their own fields. In many cases, it is more satisfactory to rely on particular experience, when it appears tolerably exact, than to demand ideas, so often vague of what is not immediately within the practice of the man who speaks. These difficulties have occurred so often, and in so many shapes, that the reader can hardly imagine the labour which it repeatedly cost

me to gain that approximation to accuracy, which I was fortunate enough sometimes to attain. But, after all the inquiries I have made, with attention and industry, I do not presume to insert here an abstract of my notes as intelligence that can be *entirely* relied on: I am satisfied, that it is impossible to procure such, without application, time, and exertions, which are not at the command of many travellers. Contenting myself, therefore, with the probability of being free from gross errors, and with the hope of giving some information on the subject, not to be found in other books, I venture to submit the following extract to the public eye, though it be a result inadequate to the labour, variety, and expected success of my inquiries. It is necessary farther to premise, that the reader must not contrast the circumstance of one place with those of another, under the idea that a considerable difference is any proof of error in the account. The price of an arpent is sometimes out of proportion to the produce; and the profit at other times unaccounted for by either:—this depends on demand, competition, the division of properties, the higher or lower ratio of expence, and on various other circumstances, which, to explain fully in each article, would be to enlarge this single chapter into a volume; I touch on it here, merely to guard against conclusions, which are to be made with caution. The towns named in the following table, are the places where I procured intelligence.—None are inserted in which I did not make the inquiry, as I was at every place mentioned in the margin.

The rents of vines are named but at few places; for they are very rarely in any other hands than those of the proprietor; even where rent is named, there is not one acre in an hundred let.

The price of the product is every where that of the same autumn as the vintage: those who can afford to keep their wine have much greater profits: but as that is a species of merchandize as much in the power of a dealer as of a planter, it ought not to be the guide in such accounts as these.

ISLE OF FRANCE.—*Arpajon*.—Rent of some to 80 liv.; in common 25 liv. Expences in labour, exclusive of vintage, 60 liv. (2l. 10s. 9d. per English acre). Produce, 6 pieces, of 80 pints, each $1\frac{1}{4}$ bottle.

Eslampes.—Measure 80 perch, of 22 feet. Produce, 10 to 22 pieces. Rent to 90 liv. Labour, 60 liv. (2l. 13s. 9d. per English acre), vintage excluded.

Orleans.—Price in the town, 150 liv. the piece, of 240 bottles, and retail 6 to 10s. the pint, of $1\frac{1}{4}$ bottle. Rent, 45 liv. Labour, 40 liv. vintage excluded (1l. 13s. 9d. per English acre.) Arpent of 40,000 feet.

S. of ditto.—Measure 100 perch, of 20 feet. Produce, 7 pieces, and in a good year 12. Rent, 36 liv. Labour, 40 liv. (1l. 13s. 10d. per English acre).

SOLOGNE.—*Verson*.—Rent in common, 35 to 50 liv. of the best 60 liv. the *fétéree*. Produce, 10 to 12 pieces, and to 22.—Account here,

Rent,

V I N E S.

3

Rent, - - -	60 liv.	Produce, 11 pieces, at 20 liv.	220 liv.
Tailles, about	12	Expences, - - -	156
Vingtieme,	5	Profit, - - -	64
Labour, - -	40		
Props, - - -	6 10s.		
Vintage,	33	Price, 220 liv. (9l. 6s. 4d. per English acre.)	
	<hr/> 156 10		

They renew some of the vines every year, by laying down shoots, called generally *provins*, but here *fausses*, five hundred per annum, at 50*s.* the hundred. They manure to the amount of thirteen small cart loads, not reckoned in the above account. Twenty people necessary for gathering an arpent, at 12*s.* a day, and food. Vines are sometimes much damaged by frosts in the spring.

BERRY.—*Vatan.*—No props; give four hoeings. *Fausse* 1 liv. 15*s.* the hundred. Rarely let. Produce, 3 pieces per *fétéree*, some 6 or 8; price now 24 liv. Rent, 60 liv. Produce, 168 liv. (6l. 13*s.* 10*d.* per English acre.) To plant a *fétéree*, for setting only, 45 liv. to 48 liv.; for two years produces nothing; the third a little. All agree it is the most profitable husbandry, if one be not obliged to sell in the vintage, for want of capital to keep the wine.

Chateauroux.—Very few let. Earth them four times. Produce, 3 poinçons, or pieces, a *fétéree*. Rent, 60 liv.

Argenton.—Produce 5 or 6 pieces the *fétéree*, each piece 160 bottles. Planted about 2 feet 6 inches square. Use props of quartered oak.

QUERCY.—*Brive.*—A journal one-fourth of a *fétéree*, 0,4132 (*Paucton.*) In a good year produce 2 muids, of 242 pints of 2 bottles, but not general. Price, 3 to 6*s.* the pint. Labour, 15 liv. vintage excluded.

Pont de Rodez.—The plants at 4 feet square; very old and large. Every where quite clean, and in fine order, worked four times. Price, 6 liv. for 96 Paris pints. Cartona about half an acre.

Pellecoy.—Pais vineyards, of which there are many so steep, that it is strange how men can stand at their work. One-third of the country under vines, which are planted on absolute rocks, but calcareous.

Cabors.—Nineteen-twentieths under vines; in regular rows, at 4 feet; many more than two hundred years old. The true *vin de Cabors*, which has a great reputation, is the product of a range of rocky vineyards, that are upon hills hanging to the south, and is called *grave* wine, because of the stoney soil. Much subject to storms of hail. Measure the *fétéree*, not quite an arpent. Produce, 4 barriques, each 210 common bottles. Price, 50 liv.; sometimes at 20 or 30 liv.; and if two or three plentiful years together, the price of the wine does not exceed the cask; last year 12 liv.; 50 liv. the barrique, is 3 liv. the

dozen. Price, 800 liv. the measure (33l. 18s. 1d. per English acre); some at 150 liv. (6l. 6s. 10d.); also at 300 liv. (12l. 13s. 8d. Labour, exclusive of vintage, 30 liv. (1l. 5s. 4d.) Their wines all bear the sea well. The inhabitants and proprietors have little to do in the wine trade; dealers buy up for the merchants at Bourdeaux, who mix these wines with their own thin bodied ones, and sell them for claret to the English, Dutch, &c. They make much brandy; five barriques make one of brandy. I drank this wine of three and ten years old; the latter 30s. the bottle, and both excellent. I imported a barrique, three years old, at 100 liv. prime cost and charges; and it cost me into my cellar in Suffolk 15l. more, in freight, duty, carriage, and charges of all sorts. Monf. Andoury, aubergiste at the *Trois Rois*, with whom I settled a correspondence, might send me good wine; but not putting it into a double barrel, which he promised, it came to me much too weak; for the *vin de Cabors* is full bodied as port, but much better. A barrique I had also of another sort of wine, from the Chev. de Cheyron, near Leyborne; and, for want of being cased, it turned out such poor stuff, that it is hardly good enough for vinegar. Without double casing (and with it, for what I know), wines, *on a private account*, are tapped, and filled up with water.

Ventillac.—See them, for the first time in going south, ploughing between the rows of vines, at 5 feet and 5½ feet asunder.

Noé.—Ox-hoeing the vines on a plain; each ox walks on an interval, with a row between them; and yoked with a sliding yoke, to vary the distance from ox to ox. Many young plantations of vines.

ROUSILLON.—*Pia*.—Vineyards not reckoned profitable, on land that will do well for other products: a minatre (1200 cannes, about 40,000 feet), from five to ten charges, each 128 bottles, or pints of Paris. Good wine, of last vintage, 6 liv. to 10 liv. the charge; but old at 72 liv.

Sejean.—The charge contains 60 pots, and weighs 360 lb.; five charges the muid, and the muid four tonneaux of Bourdeaux; price 10 liv. or 12 liv. the charge; freight from Cette to Dunkirk, 50 liv. 10s. the ton, and 20s. gratification; duty on export 7 liv.

Beziers.—Vineyards planted by Abbé Rozier, four feet four inches, by three feet ten inches, but not regular; set in a deep fosse, and covered with flints only.

Méze.—New vineyards planted in all parts. A *fétéree*, in a common year, gives two muids, or four tonneaux; 576 pots to the muid, or 768 bottles, each a Paris pint. Four tonneaux of wine, give one quintal of brandy, which sells, at present, at 122 liv. 12s. the quintal. Produce in money 96 liv. (8l. per English acre), labour exclusive; vintage 15 liv. (1l. 6s. per English acre). Examined a vineyard, planted 1250 plants per *fétéree*; they were four feet nine inches one way,

way, by four feet six inches the other ; each plant therefore occupied $21\frac{5}{4}$ feet square : rejecting the fraction, there would be 2073 in an English acre ; thus the *sétéree* is something better than half an acre. They are worked twice a year by hand ; the expence 15 liv. the *sétéree* : the cuttings pay the expence of taking. Taille 30*s*. and making the wine 20*s*. the muid ; common price of the wine 24 liv. the tonneaux.

Pijan.—Produce, $1\frac{1}{2}$ muid per *sétéree*, at 50 liv. 640 bottles, or 2*s*. the bottle. Within two leagues, Frontignan, so famous for its muscat wines, a *sétéree* of land has there yielded 300 liv. and half as much in a common year. Montbasin is also noted for its muscats, which sells as dear as those of Frontignan : three barriques make one muid, or 640 bottles : price in a common year, embarked at Cette, 300 liv. : the red wine of Montbasin, 100 liv. the three barriques.

To Nimes.—Several thousand acres of vines on a level plain.

Nimés.—For several leagues around, the vineyards yield from one muid to six per *faumée* ; three, on an average ; and the mean price 60 liv. : measure, 1715 cannes in a *faumée*, or 61,740 feet.

Plaisance.—An arpent of wheat, one year with another, yields more than an arpent of vines ; but an arpent of vines sells for near double one of arable.

Auch to Fleuran.—Many vines. Price, 500 liv. (2*l*. 17*s*. 6*d*. per English acre).

Leitour.—Ditto on the stoney hills. Measure a sack, that land sown with a sack of 145lb. wheat. Price, 400 liv. (17*l*. 10*s*. per English acre).

La Morte.—*Landron*.—Vines on the hills. Measure the journal, and further ditto, in the rich vale on the Garonne : props of willow. Price, 1000 liv. (50*l*. per English acre).

Langon.—Yellow wine famous. Measure, arpent. Produce, 5 or 6 barriques. Price, 1000 liv. the arpent (50*l*. per English acre). Produce, 300 liv. (15*l*. per English acre).

Barsac.—Sell at 5*s*. or 6*s*. the pas of 2 feet 6 inches ; 90 pas the auln ; and price 100 liv. Four rows of vines, or 4 aulns, make the breadth, and 90 pas long ; are dressed four times a year, for 3 liv. : 45 rows a journal ; but sell the space planted at one price, and the interval at another. The vines 20 liv. to 22 liv. the auln ; the spaces between at 3 liv. Ninety by $2\frac{1}{4}$, or 180 feet multiplied by $2\frac{1}{4}$, for the breadth 450, and by 45, the number of rows, gives 20,250 square feet for a journal : 45 rows, at 22 liv. are 990 liv. : but 45 by 3, the price of the interval 135 liv. : average 562 liv. on the supposition of half vines, half intervals. Hills that hang to the Garonne, on the N. side, an immense range of vines.

Castres.—In a journal, the half only planted as above, will give, in a good year, 4 tonneaux, average $1\frac{1}{2}$. Two years ago, 35 liv. the tonneaux ; this year, 60 liv. to 70 liv. : at 40 liv. it is 90 liv. per journal. Casks from the N. of Europe,

Europe, much inferior to French ones, because the staves are larger and thicker; price of them, 240 liv. the dozen. Journal of Bourdeaux, to arpent de France, as 0,6218 to 1.

Bourdeaux to Cubzac.—This country, part *palus* and part high: produce 5 to 6 barriques on the latter, and 2½ to 3 tonneaux on the other: 1200 liv. (61l. 8s. 6d. per English acre) a common price; but some journals rise to 3000 liv. (153l. 11s. 3d. per English acre), and even to 4000 liv. (191l. 19s. 3d.)

To Cavignac.—Produce wine 5 to 6 barriques the journal: make much brandy; 5 or 6 for 1; 220 bottles are sold at 120 liv.: their white wine for export is now at 150 liv. the tonneaux. The fogs and rains this year, when the vines were in blossom, damaged them so much, that the crop will be very poor; which they are not sorry for, since another great vintage or two would have ruined them, by the low price which is the consequence. They have a fabric of tartar.

ANGOUMOIS.—*To Petignac.*—*Roulet.*—The journal of 200 last each, 12 feet square, gives 1½ tonneaux; on good land, 4 to 6 barriques the journal of 200 carreaux of 12 feet square, 28,800 feet; an arpent 1½; on worse land 1½ to 3. A journal of wine not equal to the value of one of wheat: make much very fine brandy.

To Angoulême.—A journal, vines and arable land, of an equal price; 200 liv. common (10l. per English acre); produce 40 liv. (2l. per English acre).—An immense range of vines: produce, 3 to 4 barriques; common price, 10 liv.: make a great deal of good brandy, which sells now at 150 liv. the barrique, but has been at 60 liv.; best vineyard 300 liv. to 400 liv.

Verteuil.—Price, 10 liv. to 15 liv. the barrique: proportion of brandy varies from 4 to 9 of wine for 1; in general 6 for 1.

Caudec.—Give 2, 3, and 4 barriques per journal.

POITOU.—*Chateaurault to Les Ormes.*—Poor hills, with vines, sell equally with their best vale lands. Measure the boisselée.

TOURAINÉ.—*Tours.*—Produce, 5 to 30 pieces per arpent; average 10; and mean price, 15 liv. (150 liv. is 4l. os. 3d. per English acre): measure 100 chaîné of 25 feet, 62,500 feet.

Amboise.—An arpent 8 pieces, at 4 liv. 192 liv. (5l. 12s. per English acre): meadows a better estate and sell higher: the vines are 1500 liv. (43l. 15s. per English acre).

Blois to Chambord.—Almost all the country vines, and many new plantations, on a blowing sand; 2000 acres under the eye at once. Arpent 1600 toises: produce 12 poinçons, and, in good years, to 36, each 240 bottles; mostly made into brandy: in one village, last winter, they made 3000 poinçons: in some years

years 3 of wine make 1 : an arpent requires 7200 props, which last about eight years ; the price 18 liv. to 20 liv. the thousand.

Chambord.—Same measure : average produce 12 pieces.

To Petiviers.—Produce, 12 pieces on good land, at 36 liv. now ; but average 10, at 24 liv. or 240 liv. (8l. 8s. per English acre). Measure 100 perch, at 22 feet : price 1000 liv. (35l. per English acre).

Petiviers.—Price of an arpent 700 liv. (24l. 10s. per English acre) : produce, 4 to 20 pieces ; average 10 : price now 50 liv. ; but average 24 liv. or 240 liv. (8l. 8s. per English acre). labour, exclusive of vintage, 30 liv.

ISLE OF FRANCE.—*La Chapelle La Reine*.—Produce, 10 pieces, at 20 liv. 200 liv. (7l. per English acre) : labour, exclusive of vintage, 30 liv. : measure 100 perches, 22 feet : price 600 liv. (21l. per English acre).

Liancourt.—A bad arpent 300 liv. ; a good 600 liv. (450 liv. is 15l. 13s. 3d. per English acre) : the measure 100 perches, at 22 feet. Produce, 3 muids, at 60 liv. 180 liv. (6l. 6s. per English acre) the muid, of 360 Paris bottles ; yet bad, and not drank by gentlemen. Props, last five or six years, 10 liv. the thousand ; to keep an arpent in order, 2000 every year.

BRETAGNE.—*Auvergnac*.—A scattering of them from Guerande hither, and no where else N. except a few on the coast at Piriac and St. Gildas. Measure the journal of 1280 toises. Price, 800 liv. (29l. 3s. 10d. per English acre). Produce, 6 to 8 barriques, each 240 pints of Paris. Common price, 15 liv. to 20 liv. This for a good year. They reckon, that if they have no crop, they lose 60 liv. per journal.

Nantes to Ancenis.—Produce, six barriques, now 25 liv. All promiscuous, and no props.

Ancenis.—Boifelée, the fifth of an arpent de Paris ; sells, per arpent, at 750 liv. Produce, in a common year, $1\frac{1}{2}$ barrique, or $7\frac{1}{2}$ per arpent : and common price 22 liv. 165 liv. (8l. 8s. 10d. per English acre) : sometimes let, at three-fourths and one-half produce, to metayers. Labour, 6 liv. the boifelée, and 6 liv. the vintage ; in all, 60 liv. the arpent. Great region of vines along the river ; they extend not far from it : dung very little ; many not once in fifteen years.

Varades.—Meadows sell at double the price of vineyards, yet these 600 liv. (30l. 14s. 3d. per English acre).

ANJOU.—*St. George*.—Boifelée, $\frac{1}{4}$ of an arpent, or 10,000 feet. An arpent, 40,000 feet, of the worst vines sells at 200 liv. ; best 500 liv. (350 liv. is 14l. 9s. 7d. per English acre). Produce, $1\frac{1}{2}$ to 5 barriques.

Angers.—On the Loire, vineyards are various ; some produce very little of the best wine ; and others, by manuring, much of an inferior quality. Four barriques of good wine, on an arpent of 100 cords, of 25 feet, or 62,500, is a common

a common produce, but not a medium. The price, in a plentiful year, 35 liv.; and in one of scarcity, 50 liv. the barrique: this year it is 25 liv. but the wine bad, the grapes not being ripe. Four barriques, at 40 liv. make 160 liv. Expences—labour in digging 24 liv.; vintage 3 liv. the barrique, or 12 liv. the arpent; casks, at 5 liv. 20 liv.; tythe $\frac{1}{11}$ th; besides taxes. The assertion general, that vines are the worst of all estates. Why? Because, for one year in five or six, they yield nothing; and sometimes little, for two or three years together. But admitted, at the same time, that if a man has money to enable him to keep his wine, two good years pay more than the fee simple. An arpent of the best vines on the Loire, sells from 3000 to 4000 liv. Now, to gain from hence some facts by combination, call this 3500 liv. and that it pays only 5 per cent.—it is 175 liv.; labour 36 liv.; casks 25 liv.; and here is 236 liv. without a penny for the king, or any *profit* to the proprietor: at 5 barriques, this makes 47 liv. each; a sure proof, either that the produce must be more than 5 barriques,—or that the price must be more than 47 liv.; probably 9, at 40 liv. (360 liv. is 9l. 13s. 4d. per English acre), for a mean arpent, at 1750 liv. (47l. 5s. 3d. per English acre).

Duretel.—Vines sells higher than arable, and meadow higher than vines.

La Roche Guyon.—Vines the worst estate in the hands of poor proprietors only.—Account of an arpent of Paris. Price, 1200 liv. (61l. 8s. 4d. per English acre.)

	Liv.		Liv.
Rent; the interest of the price, at 4 per cent.	48	Produce, 6 muids, at 50 liv.	300
Labour, } 68 liv. (3l. 9s. 2d. English acre)	60	(15l. 7s. 1d. English acre.)	
Vintage, }	8	Expences, - - -	227
Manure, - - - -	40	Profit, - - - -	73
Six casks, - - - -	36		
Props, - - - -	30		
Taille, - - - -	5		
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The muid 240 pints de Paris.

An extraordinary good year is 10 muids; a middling one six; and a bad one three. As to no produce at all, or so little as one, no such thing is known, not even in forty years. But query, hail?

In 1785, the crop was 12 muids, at 27 liv.	324 liv.
1786, 5 - - - 70	350
1787, 3 - - - 90	270
1788, 4 $\frac{1}{2}$ - - - 75	337

The labour consists in carrying of dung, pruning, trimming, four diggings, flaking, tying, budding, &c.

How

How this husbandry can be esteemed unprofitable, as it is generally in France, surpasses my comprehension: in the hands of a man without a sufficient capital, it certainly is so; but thus also is that of wheat and barley.

Neuf Moutier.—In one of the richest districts in France, vines on the slopes sell at 2000 liv. to 2500 liv. (2250 liv. is 78l. 13s. 3d. per English acre) the arpent of 100 perches of 22 feet; where the rich vales let at 40 liv. to 60 liv.; and land of 40 liv. sells not higher than 1500 liv. or 1600 liv.

CHAMPAGNE.—*Epernay, &c.*—Two-thirds of all the country around, about Ay, Cumiere, Piery, Disy, Hautvilliers, &c. &c. under vines; and here all the famous Champagne wines are made. The country producing the fine white wine is all contained in the space of five leagues: and three or four more include Avise, Aungé, Lumenée, Crammont, &c. where they make the white wine, with white grapes only. At Ay, Piery, and Epernay, the white wine is all made with black grapes. La Montagne de Rheims, Bouzé, Verféé, Verznée, Tease, Airy, and Cumiere, for the *bon rouge de la Marne*. At Airy the first quality of the white also made. With the black grape they make either red or white wine, but with the white only white wine.

The price of the land is very high; at Piery 2000 liv.; at Ay 3000 liv. to 6000 liv.; at Hautvilliers 4000 liv. The worst in the country sells at 800 liv. (3000 liv. is 105l. 9s. per English acre; 6000 liv. is 210l. 18s.)

The produce, as may be supposed, varies much; at Ay, two to six pieces, and four the average; at Reuil and Vanteuil, to twenty pieces; at Hautvilliers, a convent of Benedictines, near Epernay, eighty arpents that yield two to four; and the price varies equally: at Ay, the average is two, at 200 liv.; one at 150 liv.; and one at 50 liv. By another account, 200 liv. to 800 liv. the queue, of two pieces; average 400 liv. the queue. At Reuil and Vanteuil it is 60 liv. to 100 liv. The vines of Villiers 700 liv. to 900 liv. the queue. Red wine is 150 liv. to 300 liv. — Account of a considerable vineyard, an average one, given me at Epernay.

<i>For an Arpent.</i>		<i>Liv.</i>	<i>Per English Acre.</i>
Interest of purchase, 3000 liv.	- -	150	£. 6 11 3
Labour, - - - -	- -	55	2 8 1½
Renewal (<i>provins</i>) ditto, - - - -	- -	24	1 1 0
Tying, - - - - -	- -	8	0 7 0
Props, - - - - -	- -	30	1 6 3
Manure, 1 part dung to 14 earth, - - -	- -	20	0 17 6
Vintage, 12 liv. a piece, - - - -	- -	48	2 2 0
Casks, - - - - -	- -	15	0 13 1½
Taxes—taille, vingtieme, and capitation,	- -	9	0 7 10½
Carry forward, - - - -	- -	359	15 14 1½

<i>For an Arpent.</i>		<i>Per English Acre.</i>
	<i>Liv.</i>	
Brought forward,	359	£. 15 14 1½
Aides, 15 the queue,	30	1 6 3
Cellar, vaults, prefs, reservoirs, tubs, &c. and building to hold them, 8000 liv. for 20 arpents, or 400 liv. per arpent, the interest,	20	0 17 6
	409	17 17 10½
<i>Product.</i> —Two pieces, at 200 liv.	400	17 10 0
One ditto,	150	6 11 3
One ditto,	50	2 3 9
	600	26 5 0
Expences,	409	17 17 10½
Profit,	191	8 7 1½

Which, with the interest charged, makes 10 per cent. on 3000 liv. land, and 400 liv. buildings; the general computation, and which seems admitted in the country. Sixty women are necessary to gather the grapes for four pieces, by reason of the attention paid in the choice of the bunches; a circumstance to which much of the fine flavour of the wine is owing, as well as to singularity of soil and climate; the former of which is all strongly calcareous, even to being white with the chalk in it. A fine lengthened slope of a chalk hill, hanging to the south, between Disy and Ay, which I examined, is entirely covered with vines, from top to bottom, and is the most celebrated in the province. It is indeed rather a marl than a chalk; in some places white, in others much browner, and may properly be called a calcareous loam on a chalk bottom. This marl is, in some places, very deep, and, in others, shallow. I was shewn pieces worth 6000 liv. the arpent, and others worth 3000 liv. but the difference of soil was not perceptible; nor do I credit that this difference depends on soil: none of it approaching to pure chalk. It is impossible to discover, in the present state of knowledge and information, on what depends the extraordinary quality of the wine. The people here assert, that in a piece of not more than three arpents, in which the soil is, to all appearance, absolutely similar, the middle arpent only shall yield the best wine, and the other two that of an inferior quality: in all such cases, where there is something not easily accounted for, the popular love of the marvellous always adds exaggeration, which is probably the case here. Attention in gathering and picking the grapes, and freeing every bunch from each grape that is the least unsound, must tend greatly to insure wine of the first quality, when the difference of soil is not striking.

The

The vines are planted promiscuously, 3 or 4 feet, or $2\frac{1}{2}$ from each other : are now about 18 inches or 2 feet high, and are tied to the props with small straw bands. Many plantations are far from being clean, some full of weeds ; but a great number of hands spread all over the hill, sarcling with their crooked hoe.

As to the culture, in the middle of January they give the cutting, *taillé* : in March dig the ground : in April and May they plant the provins : in June tie and hoe the saps : in August hoe again : in October, or, in good years, in September, the vintage.

To plant an arpent of vines, costs in all 50 louis d'or : there are 8000 plants on an acre : and 24,000 saps and the props cost 500 liv. : to keep up the stock of props 30 liv. a year. It is three years before they bear any thing, and six before the wine is good. None are planted now ; on the contrary, they grub up.

Very few persons have more than twenty or thirty arpents, except the Marquis de Sillery, near Rheims, who has two hundred and fifty arpents. At Piery there are twenty arpents now to be sold ; a new house, a good cellar, magazine, a good press, and every thing complete, for 60,000 liv. : the vines a little, but not much, neglected. For this sum I could buy a noble farm in the Bourbonnois, and make more in seven years than by vines in twenty.

Those who have not a press of their own, are subject to hazards, which must necessarily turn the scale very contrary to the interests of the small proprietor. They pay 3 liv. for the two first pieces, and 25*s.* for all the rest : but, as they must wait the owner's convenience, their wine sometimes is so damaged, that what would have been white, becomes red. Steeping, before pressing, makes red wine.

As to pressing, to do it very quickly and powerfully, is much the better way ; and they prefer turning the wheel of the press by six, seven, or eight men, rather than by a horse.

In regard to the aides, or tax, on the transfer of wine, the proprietor who sells a piece worth 200 liv. pays

Ten sols per liv.	-	-	-	10 liv.
Augmentation ; <i>gauge</i> , <i>conflag</i> , &c.	-	-	-	5
Octroi de la Ville and du Roi,	-	-	-	5
				<u>25</u>

The merchant, when he sells it, pays the same ; and every person through whose hands it passes. The duty at the port, on exportation, is about 15 liv. each piece. The cabareteer and aubergiste pays 30 or 40 liv. more retail duty. The wine trade with England used to be directly from Epernay ; but now the wine is sent to Calais, Bologne, Montreuil, and Guernsey, in order to be passed into England, they suppose here, by smuggling. This may explain our Cham-

pagne not being so good as formerly. Should the good genius of THE PLOUGH ever permit me to be an importer of Champagne, I would desire Monf. Quatre-foux Paretclaine, merchant at Epernay, to send me some of what I drank in his fine cellars. But what a pretty supposition, that a farmer, in England, should presume to drink Champagne, even in idea! The world must be turned topsy-turvy before a bottle of it can ever be on my table. Go to the monopolizers and exporters of woollens—go to—and to—and every where—except to a friend of the plough!

The ecclesiastical tithe is a heavy burthen. At Hautvilliers the eleventh is taken for a dixme; at Piery the twentieth, or in money 4 liv. 10s.; at Ay, 48s. and at Epernay 30s.; at Disy $\frac{1}{12}$; but with all this weight of tax, nothing is known or ever heard of like the enormities practised in England, of taking the actual tenth.

The idea of the poverty attending vines is here as strong as in any other part of France: the little and poor proprietors are all in misery. The fact is obvious, that a hazardous and uncertain culture is ridiculous, for a man with a weak capital. How could a Kentish labourer be a hop-planter? But no discrimination is found commonly in France—the assertion is general, that the vine provinces are the poorest; but an assertion without explanation is utterly ridiculous. To render vines profitable, it is a common observation here, that a man ought to have one-third of his property in rents, one-third in farm, and one-third in vines.

It is easy to conceive, that the most successful cultivators are those who have the largest capitals. It is thus that we hear of the exertions of merchants; men who not only have many arpents of their own vines, but buy the wine of all their little neighbours. Monf. Lafnier, at Ay, has from fifty to sixty thousand bottles of wine always in his cellar; and M. Dorfé from thirty to forty thousand.

Rheims.—Average price of an arpent 2400 liv. (84l. per English acre.)

<i>Account.</i>			
	Liv.		Liv.
Interest, - - - - -	120	Produce, 3 pieces, at	
Culture by contract, - - - - -	40	240 liv. - - - - -	420
Manured every fifth year, 60 liv.; and 1000 men or women's		(14l. 14s. per English	
loads of earth to mix, 36 liv. - - - - -	96	acre.)	
Props, 20 bundles, - - - - -	12		
Extra hoeing, - - - - -	6		
Taxes, - - - - -	8		
Casks, - - - - -	18		
Vintage, at 20s. a day, - - - - -	18		
Prefs, four men, at 20s. and 20s. food, - - - - -	8		
Carry forward, - - - - -	326	Carry forward, - - - - -	420

	Liv.		Liv.
Brought forward,	326	Brought forward,	420
Interest of buildings, cellar, magazine, prefs, and utensils,	30		
The cellar-man, 200 liv. for 20 arpents, per arpent,	10		
	<u>366</u>	Loss,	24
Labour, 64 liv. (2l. 4s. 7d. per English acre): interest of			
which for first year,	18		
	<u>384</u>		
Droit d'aides, 7½ per cent. on value, three pieces gros, be-			
fides confiage, &c. &c.	40		
	<u>424</u>		<u>424</u>

But instead of loss, every one I talked with, and the gentleman himself who gave me this account, Monf. Cadot L'Ainé, who has a considerable vineyard, assured me, that they pay, on an average of ten years, 7½ per cent. on the capital; this will make a difference of 75 liv. which, with the 24 liv. loss in this account, is 99 liv. which must be partly deducted from these expences, and partly added to the produce. On an average, the manuring is, I suspect, estimated too high. The vines this year promise to yield not a piece per arpent; not by reason of frosts last winter, but of the cold, being so late as last week (in July).

The little proprietors here also are generally very poor, and many are ruined by not being able to wait for a price. The wine trade at Rheims amounts to four or five millions per annum (175,000l. to 218,700l.)

Sillery.—The Marquis has a hundred and sixty arpents under vines, and not two hundred and fifty, as I had been informed; he has cellar room for two hundred pieces; this was mentioned as an extraordinary circumstance, but it shews that he is very deficient in a power of keeping his wines: a hundred and sixty arpents, at three each, are four hundred and eighty pieces; so that his cellar, instead of containing the crop of three years, will not hold half the crop of one year. It is evidently a business that ought to have a large capital, and even an apparently superfluous one, or all the profit goes to the merchant.

LORRAINE.—Braban.—Price, 175 liv. (25l. 10s. 1d. per English acre). Measure, 80 perches, at 11½ feet.

Verdun.—Measure, 480 verges, of 8 feet 2 inches, equal 66 perches of Paris: highest fell to 2400 liv.; not uncommon 1100 liv. (84l. per English acre).

Metz.—Measure, journal, equal to 69½ perches of Paris. Price, 1200 liv. (89l. 14s. per English acre).

Account.

	Liv.		Liv.
Culture, 6 liv. per monée, 8 monées in the journal,	48	Produce, 40 hottes, each 44	
Props, 20 <i>s.</i> the monée,	8	pints of Paris, at 6½ liv.	260
Two loads of dung, at 3 liv.	6	(20 <i>l.</i> 9 <i>s.</i> 6 <i>d.</i> per English	
Repairs of casks,	6	acre.)	
Taxes, taille, and capitation,	13	Expences,	111
Ditto vingtieme,	4	Profit,	149
Preffing, one-thirtieth of the crop,	9		
Vintage,	16		
	111		
Labour, 64 liv. (5 <i>l.</i> 0 <i>s.</i> 7 <i>d.</i> per English acre).			

But interest of 1200 liv. is 60 liv. and the tithe here is from the twentieth to the thirtieth to be deducted. The general assertion, which seemed to admit no doubt, was that the profit is 7 per cent.

Pont au Mouffon.—Measure a journal, 10 hommeés, or 250 verges of 10 feet, the foot of 10 inches.

Account.

	Liv.		Liv.
Labour,	30	Produce, 400 hottes, on 13	
Manuring, 64 liv. but once in eight years,	8	arpents, 30 per journal,	180
Vintage, twenty-five persons for 13 journals, at 12 <i>s.</i> fed,	3	(14 <i>l.</i> 11 <i>s.</i> 3 <i>d.</i> per English	
Prefs,	2	acre.)	
Casks,	16	Expences,	121
Taxes, no droit d'aides,	3	Profit,	59
Props,	4		
Arpent, 800 liv. (66 <i>l.</i> 2 <i>s.</i> 1 <i>d.</i> per English acre),			
Buildings, 60			
860	45		
Interest of ditto,			
Droit de gabelle, and gauge, 13 <i>s.</i> per hotte,	10		
	121		
Labour, 33 liv. (2 <i>l.</i> 9 <i>s.</i> 10 <i>d.</i> per English acre.)			

But some little error here, for the common calculation is, that they pay 10 per cent.

Vines are planted more and more, the culture augmenting every day; they plant the land proper for wheat as readily as any other.

Nancy.—Measure, 19,360 feet. Price of the best, 1000 liv.; the worst, 500 liv. (at 750 liv. 65*l.* 12*s.* 6*d.* per English acre). They have what they call the *gross race*, and the *petite race* of vines; the first gives much in quantity, but of a bad quality; the latter wine of a good quality, but in quantity small.

The

The medium produce is twenty measures per journal, of eighteen pots of two pints of Paris, of the gross race, and ten of the petite. The mean price of the first 5 liv.; of the latter 10 liv. (at 100 liv. it is 8l. 15s. per English acre).

Luneville.—The journal 15,620 feet. Produce, 40 measures of the gross race, of all sorts; average, twelve measures, 6 liv. 15s. Price, per journal, 550 liv. (56l. 17s. 6d. per English acre). Produce, 80 liv. (8l. 12s. per English acre).

ALSACE.—*Wilttenheim*.—Measure, 100 verges, at 22 feet. Price, 900 liv. (31l. 10s. per English acre).

Straßbourg.—Measure, 24,000 feet. Price, 800 liv. (55l. 7s. 9d. per English acre). Produce, thirty measures, of twenty-four pints of Paris. Good price, 6 liv. the measure; middling, 4 liv. 10s.; low, 3 liv. (at 150 liv. produce, it is 1cl. 7s. 4d. per English acre).

Schelestadt.—Produce, forty measures. Price, 6 liv. the measure, 240 liv. (16l. 12s. 6d. per English acre).

Isenheim.—Some so high as 3000 liv. but few that yield a hundred measures, at 6 liv. but by no means common.

FRANCHE COMPTE.—*Beaume*.—Measure, an œuvre. Produce, a muid, at 40 liv. to 60 liv.

Besançon.—Measure, a journal, of 8 œuvres; the œuvre 45 perches, of 9½ feet. Price, 40 liv. to 400 liv. the œuvre. Produce, a quarter of a muid to one muid, or eight per journal. The grape, called the *gammé*, yields the most wine, but of the worst quality. Common Price, 60 liv. the muid.—Account of a journal, 32,400 feet.

	Liv.		Liv.
Interest of 2400 liv. (123l. 6s. English acre), at 5 per cent.	120	Produce, 4 muids, at	
Culture, 5 liv. the œuvre,	40	60 liv. (12l. 6s. per	
Props, 1 liv. ditto,	8	English acre,	240
Vintage, 5 liv. ditto,	40	Expences,	214
Tonneaux, 12 liv. the muid new; but reparation a trifle,	0	Profit,	26
Taille, capitation, and vingtième 8s.	3 4s.		
No droit d'aide.			
Never dung, thinking it spoils the wine.			
Fausse, renovation 3 liv. per 100,	3		
Tythe, none in common; but, where found, only from one-twelfth to one-twentieth.			
	214		
Labour, 83 liv. (4l. 4s. per English acre.)			

The common idea is, that the produce of an œuvre is 30 liv.

And the expence - - - - - 12

18

Or profit per journal - - - - - 144

Interest - - - - - 120

Remains net - - - - - 24

They

They are also generally supposed to yield but five per cent. profit on capital, and sometimes not so much.

The vines here are in double rows, at about two feet, and the props placed in an inclining position, so as to join over the centre of that space, and are there tied to a horizontal prop; by which means any small sticks answer the purpose of props.

BOURGOGNE.—*Dijon*.—Measure, journal of 900 toises. Price of common vineyards, 1000 liv. to 1500 liv. (at 1250 liv. it is 63l. 19s. 2d. per English acre), the best about Dijon. Produce, about seven or eight pieces, or muids, at 36 liv. (at 270 liv. it is 13l. 16s. 6d. per English acre): pay six per cent. But the fine vineyards of Veauune, Romané, Tash, &c. sell at 3000 liv.

Clos de Veaujeau.—This is the most famous of all the vineyards of Burgundy, the wine selling at the highest price; it contains above an hundred journals, walled in, and belongs to a convent of Bernardine monks. This reminds me of Hautvilliers, near Epernay, one of the finest vineyards in Champagne, having reverend masters also. There are no trees in that at Clos de Veaujeau, though in all the more common ones. The vines are now not more than two or three feet high, the props being short also; they are not in rows, but planted promiscuously. The soil a brown loam, inclining to reddish, with stones in it, which, on trial, proved calcareous. It is not like the fine vineyards of Champagne, on a declivity, but flat, at the foot of a hill, which is rocky. The produce, 1½ muid, at 600 liv. the muid, 900 liv. (46l. 1s. 4d. per English acre). The vineyard would, it is said, sell for 10,000 liv. the journal (511l. 17s. 6d. per English acre). They make white wine also, of a quality and price equal to the red.

Nuys—The finest vineyards sell up to 7000 liv. and 8000 liv. a journal; but in common about 1000 liv. (51l. 3s. 9d. per English acre). The produce of the fine wines never great; four pieces, or muids, of half a queue, or two hundred and forty bottles, is a great produce; 1½ middling; and, in bad years, none at all, which happens sometimes, as at present, after a very fine appearance; but the frosts at the end of May cut them off so entirely, that there is not a grape to be seen. Such wine as the poor people drink, sells commonly at 60 liv. or 70 liv. the queue, now 120 liv.—Account of a journal:

	Liv.		Liv.
Interest,	50	Produce, 1½ piece, at	
Culture, by contract (some at 60 liv.)	72	100 liv. (81. 19s. 4d.	
Props, called here, not <i>echalats</i> , but <i>paifeaux</i> ,	6	per English acre),	175
Casks repaired,	6	Expences,	148
Taxes,	8	Profit,	27
Vintage,	6		
	<u>148</u>		

One vigneron, with his wife and four children, must all work very well to do four journals ; for which, if at 60 liv. they receive 240 liv. but have the winter for other work. The vineyards which bear the greatest reputation here, after the Clos de Veaujeau, are those of St. George, Romané, La Tashe, de Vaume, Richebourg, Chambertin, and Côte roté. The best is 25l. the piece, or 3 liv. the bottle ; but this is the price of the vintage ; kept three or four years it sells for 4 liv. and even 5 liv. the bottle in the country.

In 1782, the crop was so great, that they gave 12 liv. for very miserable casks, and sold them full at 20 liv. but the wine not good. 1785 was the last great crop, when the price of a cask, a tonneau, which commonly is 12 liv. new, was 36 liv. to 40 liv. but the wine bad : they never dung for fine wines, only for bad ones, but they manure sometimes with earth. New vineyards give a larger quantity of wine than old ones, but the wine of the latter the best quality. There are here, as in all the other wine provinces, many small proprietors who have but patches of vines, and always sell their grapes ; but there is no idea of their being poorer than if they did not pursue this culture.

Beaume.—The stones in the vineyards here calcareous. An œuvre costs 400 liv. 3200 liv. per journal (163l. 16s. per English acre). Produce, two or three pieces, at 15 liv. this common wine ; but there are fine ones vastly higher. The wines of greatest name here, after the *Clos de Veaujeau*, are Volny, Pomar, Aloes, Beaume, Savigné, Mulso (white), and Maureauché, which last sells, ready to drink, at 4 liv. the bottle ; new at 1200 liv. the queue. They give here great accounts of the profit attending this culture ; but, on being analyzed, they are found all to turn on the supposition of having good cellars, and keeping for a price, which is mere merchandize, and not cultivation ; for the merchant who buys at the vintage, to fill his cellars, is exactly in the same predicament ; and to enjoy this profit, it is not necessary to cultivate a single acre.

Chagnie.—Price of an œuvre 100 liv. ; eight of them to a journal, 800 liv. (40l. 19s. per English acre). Common produce, one piece per œuvre : the price now 60 liv. the piece, but 20 liv. more common (160 liv. is 8l. 3s. 7d. per English acre.)

Couch.—An œuvre, the eighth of a journal, sells at 100 liv. ; but there is more at 80 liv. Produce, one piece, at 36 liv. common price, but now 60 liv. ; usually one piece at 25 liv. : half the produce, by contract, for labour (at the price of 640 liv. it is 32l. 15s. 4d. per English acre.)

BOURBONNOIS.—*Moulins.*—Sell to 1000 liv. the arpent (34l. 12s. 1d. per English acre) of eight boifeleés, each 168 toises, 48,384 feet. In a good year, produce eight poinçons, at 30 liv. ; common year five or six, at 30 liv. for common vineyards : half the produce is paid, by contract, for labour. Very rarely dung : props 7 liv. : tithe the eleventh.

Riaux.—Common produce, half a piece per œuvre, or boifelée; one-fourth for proprietor, and one-fourth for labour.

St. Ponerin.—Vineyards on hills, 100 liv. the boifelée; 800 liv. the arpent (27l. 13s. 10d. per English acre).

AUVERGNE.—*Riom*.—Sell at 200 liv. the œuvre; sometimes 1*s.* the bottle, or 15*s.* the pot; now 3 liv.; middling price 20*s.* to 30*s.*

Clermont.—Measure, 800 toises: best 300 liv.; worst 100 liv.; midling 150 liv. an œuvre; 1200 liv. the arpent (70l. per English acre); medium ten pots, each sixteen pints of Paris; on the best land fifteen, and the mean price 30*s.*; at present 3 liv.: tie them with willow branches, *salix viminea*.

Izoire.—In common sell at 500 liv. or 600 liv. the fêterée, but in good situations 800 liv. (46l. 12s. 9d. per English acre): the œuvre of the best yields two sommes; middling one and a half; bad one: the somme fix pots, each sixteen pints of Paris: the common price after the vintage, 25*s.* to 30*s.* the fix pots (at 168 liv. it is 9l. 16s. per English acre).

Account of an Œuvre.

	Liv.	Sols.		Liv.
Labour,	8	0	Produce, 1½ somme, at	
Props,	2	10	30 <i>s.</i> the pot, 12 liv.	
Interest buildings, 100 liv. 50 œuvres,	2	8	the fous,	21
Interest of 100 liv. purchase,	5	0	Expences,	19
Taille, &c.	0	11	Profit,	2
Provins,	0	8		
Dung ditto,	0	2		
	19	1		

By which we are only to understand that they pay little more than common interest.

Briude.—Price, 10 liv. to 100 liv. (55 liv. is 25l. 12s. 9d. per English acre): the worst are on rocks, where a storm drives soil and crop away. It is very remarkable that the rocky declivities, which are so natural to the vine, here yield a wine far inferior to the rich plain of the Limagne. This deserves remark, and a further attention from the naturalists, who examine this very curious and interesting country. They have thirty-five sorts of vines here; the *Lange dit de chien* is the first.

DAUPHINE.—*Montelimart*.—Price of a fêterée, half an arpent of Paris, 168 liv. to 480 liv. and produces seven measures of wine, called charges, each of a hundred bottles, the common price 15 liv. or 75 liv. per fêterée.

Account

Account.

	Liv.		Liv.
Interest of 300 liv. (44l. 12s. 6d. per English acre) mean price,	15	Produce, (7l. 17s. 6d. English acre),	75
Culture, 1st,	20 liv.	Expences,	58
2d,	10	Profit,	17
3d, paid by cuttings,	0		
No props.			
Vintage,	6		
Casks,	3		
Taxes,	2		
No droit d'aides.			
Cellar, &c. &c.	2		
	58		

PROVENCE.—*Avignon*.—Price 70 liv. the eymena, and produce three barrels: price at present, 6 liv. the barrel, or 3*s*. the bottle; common price 2*s*. The best vines give 8 per cent. on capital.

Aix.—The carterée 800 liv. (63l. per English acre). Measure, fix hundred cannes for the carterée; the canne of eight pans, the pan of nine inches and three lines.

Tour d'Aigues.—The produce of a fomma is a hundred coup, each 60 lb. 3 lb. a pot; and the common bottle 2½ lb.: 100 lb. of grapes give 60 lb. of wine. Mean price 30*s*. the coup, or per fomma 150 liv. Measure, 50,400 feet.

Account.

	Liv.	Sols.		Liv.	Sols.
Culture,	48	0	Produce, (4l. 19s. 6d. per English acre),	150	0
Hoeing and pruning,	12	0	Expences,	126	12
Vintage and carriage,,	10	0	Profit,	23	8
Interest of buildings, &c.	15	0			
Taille, by the cadastre (but this varies every year, by reason of provincial expence),	10	0			
Seigneurial duty,	1	12			
Price, 600 liv. (20l. 2s. 6d. per English acre), interest,	30	0			
	126	12			

Hyer.—Usually planted in double rows, at three or four feet, with intervals of different distances, ploughed, or hoed for corn; and this method they call *mayoivere*. Two hundred and eighty plants produce one bout of wine, of fix barrels, each barrel twenty-eight pots, and each pot 3 lb. Common price per bout 50 liv.

Observations.

It is merely for curiosity I observe, that the average of all the prices per measure, in the purchase of these vineyards, amounts to 61l. 8s. per acre; such a medium demands very little attention, unless the minutes were exceedingly numerous, and equally so in every province. Rejecting those in which the prices exceed 100l. an acre, as going certainly much beyond what can possibly be the medium of the kingdom, the average of the rest is 41l. 1s. 6d. per acre. But I should wish that attention were rather given to another mode of calculating the price and produce of these vineyards; there are twenty-three minutes that include both price and produce; the average of these exclusive of such as rise above 100l. purchase, and 21l. produce, is

For the price per English acre,	-	£.45	1	0
For the produce,	-	9	2	0*
Which is in French money, per arpent of Paris,—Price,	-	871	liv.	
		Produce,	175	

From which it appears, that vines, in these provinces, give, in annual produce, one-fifth of their fee simple.

The amount of labour per acre, on an average of those minutes, in which it appears to be satisfactorily noted, and rejecting the higher articles as before, is 2l. 12s. 6d.

The net profit appears, from several of the minutes, to vibrate between 7 and 10 per cent. on the capital employed.

How nearly these averages, noticed in my route, approach the real medium of the whole kingdom, it is impossible, with any degree of accuracy, to conjecture; but I am inclined to believe, that the difference may not be considerable. This, however, must be left, with a proper diffidence, to the well informed reader's superior sagacity.

The importance of this branch of cultivation to the kingdom, and the idea so common there, I may almost say universal, that the wine provinces are the poorest, and that the culture is mischievous to the national interests, are subjects too curious to be dismissed hastily: as my opinion is directly the reverse of the prevalent one in France, it is necessary to explain the circumstances on which it is founded.

* The Marquis de Mirabeau observed, that an arpent of vines is, on an average, worth double the best arpent of corn. *L'Ami des Hommes*. 5th edit. 1760. tom. vi. p. 137. This agrees pretty well with my notes.

It appears, by the preceding minutes, that the value of the soil thus employed was probably higher than it could be in any other application, good meadows (valuable from their scarcity) alone excepted: that the produce much exceeds all others; and lastly, that the employment depending upon it is very considerable. Under such leading and powerful circumstances, and connected as they are with another not less essential, that vast tracts of the land thus employed are rock and declivities, too steep for the plough,—it should seem astonishing, how an idea could ever be entertained that such a cultivation could be prejudicial to a country: it is, however, very general in France.

The question ought to be put solely on this issue—Would the same land, under any other culture, sell at the same price? 45l. per acre, amounting to thirty years purchase, at 30s. an acre, is such a value as France, in the richest vales, knows nothing of (meadows alone excepted, which will always be valuable according to scarcity and heat of climate), and we in England as little. But this greater value arises not by any means from the richest lands, but from those which, considered on a medium, are certainly very inferior to the rest of the kingdom. Great tracks could be applied to no other use than that of sheep-walk or warren; much is situated, in some of the poorest soils in the kingdom, on sands, sharp gravels, and lands so stoney, as to be inapplicable to the plough: to possess a climate that gives the power of raising such land to the value of 30l. or 40l. an acre, is beyond all doubt or question, a superiority that cannot be too much valued.

The amount of the produce is not less striking: rich pastures sell every where at high prices, because they are attended with no expences; and thus a small product may be classed with a large one; but it is not so with vines. The average of 9l. an acre, on a mean of good and bad years, is such as no other plant will equal that is cultivated in France, watered lands alone excepted. It is only on singularly fine soils, in certain peculiar districts, that any thing approaching such a product is to be met with. There is no part of Europe, in which a crop of wheat, of such value, is not exceedingly large, and much beyond the average. That of all the wheat, in any of the richest counties in England, vibrates between 6l. and 7l. an acre, prepared for, perhaps, by a barren and expensive fallow,—at least by something much less profitable than itself. What then are we to think of a plant which covers your land with a rich crop of wheat every year?

There are many men, however, in France, who will say, YOUR REASONING MUST BE ERRONEOUS; *for there is not a vine proprietor in France, who would not give you his vineyard for your ideal wheat of every year.* The observation may be perfectly just; but it is no answer to me, who am not speaking of *net profit*, but of *produce*. To him who considers the subject in a national light, and as a politician, the former is not the object;—the great point is to secure a large produce. The prince may levy such heavy taxes on the produce; and

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it may be gained by such an oporose culture, that the poor may levy a much heavier for their labour; the consequence to the cultivator may be a low profit, but to the nation at large the importance of the product remains the same, and unimpeached. And in this light I look upon that of vines as so considerable, that should the fact of the real average of the whole kingdom prove less than I make it—even so little as 7l. per acre, I should still esteem the culture an object of infinite national consequence. It is more than sugar pays in the West Indies, which is usually supposed the most profitable cultivation in the world.

In regard to the net profit, which on the minutes vibrates from 7 to 10 per cent. it does not seem to some to be adequate to the peculiar happiness of the climate, and the reputation of the wines throughout the world; or to the price of the land, or amount of the product. But, in this respect, it must be considered, that the minutes, so far as they concern the returns in money, are the prices of the vintage only: whereas every man that has a capital sufficient, by keeping his wine for three months only, adds considerably to the profit.—If a proprietor be merely able to store his crop in casks in his cellar, long enough to avoid the immediate necessity of selling for want of casks, he has an advance of price, which will greatly augment the ratio of his profit: it is very fair to give the cultivator of vines the same time that is taken by most of his brethren with whom corn is the object, that is to say, six months from the harvest. The difference of profit is exceedingly great between the sale in the vintage, and that of six months after. But it is still of more consequence to observe, that the rate per cent. here mentioned, is not on the mere business of the cultivator, but on the purchase of the estate upon which the culture is carried on. This makes an enormous difference. If agriculture, in England, yield 15 per cent. and landed property three, throw the two together, and the mean is not more than $5\frac{1}{2}$ or 6; and those who, in England, buy an estate, and stock, and cultivate it, and make 6 per cent. will not think they are suffering, notwithstanding the accumulated advantages of a century of freedom.

It is this large annual product which in the vine provinces gives bread to such numbers of people; beside the direct object of common labour, which amounts, as we have seen, to 2l. 12s. 6d. per acre, and consequently is above thrice as high as that of common arable crops; and if they are not in very complete culture, the superiority is much more considerable, there is the trade of casks, which, independent of the employment of coopers, gives a value to the woods of a country, as well as an activity to foreign commerce, by the import of staves and hoops. The props have the same effect as our hop-poles, and render willow plantations, as well as common under-woods, much more valuable than they would be otherwise. Besides, there is the circumstance, that so many politicians

cians regard alone, the exportation of the wine, and the cask or the bottle; forming, whether in the shape of wine or of brandy (as I shall by and by shew), one of the greatest trades of export that is to be seen in Europe; as much the export of French labour, as that of the silks of Lyons, or the cloths of Louviers. And after all this, if I be allowed to place last, what in truth ought ever to be regarded first, that is, the home consumption, there is the invaluable advantage of a whole people being well and amply supplied with a beverage, the effect of their own industry, and the result of their own labour; and it surely will not be thought a small advantage, that a nation has recourse, for supplying this consumption, to her sands, gravels, declivities and rocks; that she demands it not of her rich plains, but of those lands which her less fortunate neighbours are forced to cover with copse or rabbits.

But here we are not to forget, that argument is always to give way to fact. From what I have just said, the reader is not to conclude that such lands *only* are under vines in France, the contrary is the fact; I found them on the noble and fertile plain of the Garonne; on the richest lands in the vale which extends from Narbonne to Nîmes; in the vales of Dauphiné and of the Loire; and, in a word, indiscriminately on every sort of land in all the wine provinces; but I found them also on such rocky and bad soils as I have described, and in so great quantities as to shew how well adapted they are to such soils and situations. There are two reasons why vines are so often found in rich plains; the first is, the export of wheat being either prohibited, or allowed with such irregularity, that the farmer is never sure of a price: but the export of wine and brandy has never been stopped for a moment. The effect of such a contrast in policy must have been considerable, and I saw its influence in every part of France, by the new vineyards already planted, or begun to be planted, on corn lands, while the people were starving for want of bread; of such consequence, in the encouragement of any culture, is a *steady unvarying policy!* The fact is the more striking in France, because the vine culture is very much burthened in taxation; but, always possessing a free trade, it thrives. The second reason is, that the culture of this plant is much better understood in France than that of corn. An advantageous rotation of crops, and that arrangement of a farm which makes cattle necessary to corn, and corn necessary to cattle, on which the profit of arable land so much depends, is what the French have hardly an idea of. In their practice it is never to be seen, and in their books it is never to be read. But their vineyards are gardens; the turnips of Norfolk, the carrots of Suffolk, the beans of Kent, and the cabbages of an English gentleman, are not so clean as the vines of France, while the whole œconomy of the plant is perfectly understood, both in theory and practice.

It is a question which I have heard often started in conversation, whether it be nationally more advantageous that wine should be, as in France, the common-

mon beverage, or beer, as in England? How it should ever become a question I cannot understand. We are, of necessity, *obliged* to have recourse to our best lands to supply our drink; the French, under a good government, would have *all* theirs from their worst soils. The sands of Sologne, which are passed in the way from Blois to Chambord, &c. &c. are as bad as ours in Suffolk and Norfolk, which feed only rabbits. The French sands, by means of vines, yield 8l. or 9l. an acre, and those of Suffolk not so many shillings. Through nine-tenths of England, the land that yields wheat in every rotation yields also barley. If our hills, rocks, sands, and chalky declivities gave us our liquor, could we not apply these richer soils to something better than beer? Could we not, by means of rotations, that made potatoes, tares, beans, and artificial grasses, the preparatives for wheat alternately, contrive to raise infinitely more bread, beef, and mutton, if barley did not of necessity come in for an attention equal to what we give to wheat? Wheat, rye, barley, and oats exhaust, every other crop we raise, either actually or consequentially, ameliorates. Would it be no advantage to strike out one of these exhausters, and substitute an improver? Would it be no advantage to feed all the horses of Britain on beans instead of oats? Your populousness may be proportioned to your quantity of bread, mutton, and beef. With one-fourth of your land under barley, can you have as much bread, mutton, and beef, as if you were not under the necessity of having any barley at all? How few agricultural combinations must there be in a mind that can entertain doubts on such questions? There is a common idea that wine is not a wholesome beverage, I take this to be a vulgar error; bad wine, or wine kept till sharp and acid, may be unwholesome, but so is bad beer, or beer kept till acid: but this has nothing to do with the question. If the lower people be forced, through poverty, to drink bad liquor, the complaint ought not to be that wine is unwholesome, but that a bad government is unwholesome: the beer drinkers under such a one, will not have much to boast. There may be more strength and vigour of body among the common people in England than among the same class in France; if this be true, it proves nothing against wine. Are the French poor as well fed as ours? Do they eat an equal quantity of animal flesh? Were they as free? These common prejudices, for or against certain liquors, are usually built on very insufficient observation.

But the enemies of vineyards recur to the charge; *the vine provinces are the poorest of the kingdom; and you always see misery among the poor proportioned to the quantity of vines* *.—This is the main hinge on which the argument turns; it is

* So lately as in the *Journal Physique* for May 1790, *Monf. Roland de la Platiere*, a gentleman with whom I had the pleasure of some agreeable conversation at Lyons (in the happier period of his life, before he was involved in the misery and guilt of revolutions), says, that of all countries the vine ones are the poorest, and the people the most wretched! And in the *cabier* of the clergy of Auxerre, it is demanded, that the ordonances against planting vines on land proper for corn be executed. P. 19.

an observation that has been made to me a thousand times in France, and conversation never touches on the subject but you are sure to hear it repeated.—There is some truth in it as a fact—there is none as an argument.

There is usually a considerable population in vine provinces; and doubtless it is not surprising, that where there is a great population there should be many poor, under a bad government. But there is another reason, much more satisfactory, which arises not at all from the nature of the culture, but from the abuse of it.

It is the smallness of the property into which vineyards are usually divided; a circumstance carried to such excess, that the misery flowing from it can hardly be imagined by those who are whirled through France in a post-chaise. The nature of the culture depending almost entirely on manual labour, and demanding no other capital than the possession of the land and a pair of arms; no carts, no ploughs, no cattle, necessarily leads the poor people to this species of property; and the universal practice of dividing it between the children, multiplies these little farms to such a degree, that a family depends on a spot of land for support that cannot possibly yield it; this weakens the application to other industry, rivets the children to a spot from which they ought to emigrate, and gives them a flattering interest in a piece of land, that tempts them to remain when better interests call them elsewhere. The consequence is, their labouring as much as they can for their richer neighbours; their own little vineyards are then neglected; and that culture, which to a more able proprietor is decisively advantageous, becomes ruinous to insufficient funds. But a misfortune, greater even than this, is the uncertainty of the crop; to a man of a proper capital, and who consequently regards only the average of seven years, this is of no account; but to the poor proprietor, who lives from hand to mouth, it is fatal; he cannot see half a year's labour lost by hail, frost, cold, or other inclemencies of the season, without seeing, at the same time, his children in want of bread; before the ample produce comes, which certainly will come on the average account, he finds himself in the hospital.

This I take to be the origin of that general and too indiscriminate condemnation of vineyards in France. The poverty is obvious; it is connected with vines, and for want of proper distinctions, it is considered as necessarily flowing from vineyards; but, in fact, it is merely the result of small properties amongst the poor: a poor man can no where be better situated than in a vine province, provided he possess not a plant. Whatever may be the season, the poor are sure of ample employment among their richer neighbours, and to an amount, as we have above seen, thrice as great as any other arable lands afford. That culture which demands 2l. 12s. in hand labour only, whether there be crop or no crop, and which employs women and children of all ages, ought not surely to be con-

demned as the origin of distress among the poor. Attribute the fact to its true cause, the desire and spirit of possessing landed-property, which is universal in France, and occasions infinite misery. This circumstance, so prevalent in that kingdom, and (comparatively speaking) so little known in ours, where the poor are so much more at their ease than in France and most other countries, is very curious to a political observer. What an apparent contradiction, that property should be the parent of poverty, yet there is not a clearer or better ascertained fact in the range of modern politics. The only property fit for a poor family, is their cottage, garden, and perhaps grass land enough to yield milk; this needs not of necessity impede their daily labour; if they have more, they are to be classed with farmers, and will have arable fields, which must, in the nature of things, be ill cultivated, and the national interest consequently suffer.

The explanations I have given of the wine system in France will be received, I trust, with candour. To investigate such questions fully, would demand dissertations expressly written on every subject that arises, which would be inconsistent with the brevity necessary to the register of travels: I attempt no more than to arrange the facts procured; it belongs to the political arithmetician fully to combine and illustrate them.

C H A P. XI.

Of the Culture of Silk in France.

QUERCY.—*Caussade*.—IN the avenue leading to this town, two rows of the trees are mulberries, and these are the first we have seen.

Montauban.—Many mulberries here, in rows; and under some of them four rows of vines, and then six or seven-times the breadth of corn. When the leaves are not in time for the worms, or are destroyed by frosts, they are fed with lettuce leaves; and if no lettuce, with cabbage, but the silk is so worthless, that the failure is reckoned nearly equal to having none at all.

Toulouse to Noé.—Mulberry trees are here worth from 6*s.* to 20*s.* and 30*s.* each per annum, according to their size.

Noé.—Mulberries worth up to 3 *liv.* per tree, per annum. But silk worms have missed much for three years past.

Narbonne.—Many mulberries; all with pruned flat heads.

Pinjean.

Pinjean.—Olives are a beneficial article of culture, but they prefer mulberries, because they yield a crop every year. On four *fétérees* of land they have sixty trees; and at the same time the land yields barley or oats, mown for forage, of which the four *fétérees* gives 60 quintals, that sell at 33*s.* the quintal. Single mulberries have paid as far as two louis each, and many one louis. If four *fétérees* equal two acres, there are thirty trees on an acre, and the acreable produce of forage will be 52 liv. or 21. 5*s.* 6*d.*

Nismes to Sauve.—Seven mulberries on an English rood.

Quésac.—Mulberry leaves sell commonly at 3 liv. the quintal. A tree yields from one to eleven quintals: two, three, and four are common. Gathering the leaves costs 12*s.* the quintal. Fifteen quintals of leaves are necessary for one ounce of *grain* (the seed or eggs of the worm): 20 liv. the mean price of silk per lb.: reckon that an olive-tree pays as well as a mulberry.

Many mulberries about Quésac, and some on very poor dry land. In grass fields the ground is kept dug around them, as far as the branches extend. Remark some stones laid around many trees, for some distance from the stem.

Eight trees in something less than an English rood.

By information, almonds, in Rouverge, pay better than mulberries, and with much less expence and attention; 3, 4, 5, and 6 liv. a tree.

Gange.—Many fine mulberries about this place, which yield from 3 liv. to 8 liv. a tree in common, young ones excluded. They yield to twelve quintals of leaves; in general, three, four, or five. The price varies from 3 liv. to 10 liv. the quintal. They are much more valuable than olives. This year the great cold in April destroyed the young buds and hurt the crop greatly. They never think of giving any thing to worms but the leaves; have heard of twenty things, but treat the idea with the greatest contempt, knowing as they do, by the fabric, the worthlessness of silk, if the worms are so fed.

Lodeve.—Mulberries are more profitable than olives; yield three, four, and five quintals of leaves, which sell, in common, at 3 liv.

Mirepoix.—Mulberries are here, but none after, in going from Carcassonne to St. Martory.

Auch.—A few mulberries near the town.

It is here to be noted, that from Mirepoix to Bagnere de Luchon, and from thence by Pau to Bayonne, and back by Dax to Auch, a line of much more than 300 miles, I saw no mulberry trees.

GUIENNE.—*Leyrac.*—Some few mulberries.

Aiguillon.—A few trees for some miles before this place. Behind the chateau, in the town, is a large plantation, formed by the late duke; which, being in the fine vale of the Garonne, the land is cultivated as the rest, under hemp and

wheat; but both those crops are less than middling, the expression of the person who gave us the information, on account of the roots and shade of the trees. The duke gives the leaves to the people in the town, furnishing also the wood, boards, grain, and whatever else is necessary for the business, and he has in return the third part of the silk they make. Every one in the place, and all round the country, say that he loses considerably by it; asserting, that the land thus occupied is worth 500 louis a year; that the crop of silk is so precarious that he has had eight quintals, and in other years only three, two, and even one; so that on an average, his third part gives only 150 louis, and the crops under the trees cannot make up one-half of the deficiency. They also maintain, that the land is too rich for mulberries; and, to prove that they are right in their ideas, they quoted many gentlemen in the neighbourhood, who have grubbed up their mulberries.

Tours.—They have in the neighbourhood of this city many mulberries, inso-much, that the value of the raw silk has amounted, as they assert, in a good year, to a million of livres. I walked several times into the country to view the trees and make inquiries. Many of the corn fields are regularly planted all over; the gardens are surrounded with them; and the roads and lanes have rows of them. The large good trees, in a favourable year, give to the value of 4 liv. but not in common. I viewed several plantations; containing old, young, good, and bad, that gave on an average, one with another, 30*l.* which seemed, from various accounts, to be a general medium; it, however, excludes very bad years; such, for instance, as last spring, in which they had no crop at all, the frosts in April (note, this is certainly one of the finest climates in France) having entirely destroyed it. I saw several trees which gave to the amount of 10*l.* to 15*l.* at ten years old, and 30*l.* at the age of fifteen years. Plants, at two years old, are sold at 3 liv. the hundred: at three years old, 4 liv.: and good trees, proper to plant out in an arable field, 20*l.* each. In regard to the distance, at which the trees are planted, they have no general rule. I measured many distances, in a large corn field, and found them at two rod square, at an average: in another they were six yards by nine; which trees gave 40*l.* on a medium: round a garden they were at five yards from tree to tree: a field, entirely cropped with mulberries, had them in rows at one and a half rod; and between the rows another of small plants, in the manner of a hedge. If sixty square yards are allowed per tree, there will be eighty on an acre, and if they give 30*l.* each, it will amount to the vast produce of 5*l.* per acre, besides what can be gained under them; it would, however be a question, whether this under-crop would make up for bad years, that yield nothing? Around fields, in roads, corners, &c. the profit will be greater. It is remarkable,

able, however, that with all this profit attending them, they do not increase about Tours, yet not one acre in an hundred adapted to the culture, is so employed, which shews either a very uncommon want of capital, or doubts whether the cultivation is so profitable as it appears to be from such information.

In order to spread the cultivation, government established nurseries, and gave the trees gratis, until private nurseries were opened; and in winding the silk much assistance was also given to the loss to government, of 20*s.* per lb.; but now the business is carried on without any premium of that sort. Probably such encouragements were of very little use; the abuses incident to all governments would direct such assistance to be given where it was not wanted; and in that case it would, by raising disgust, do mischief.

They plant no mulberry but the white; the black they think very bad.

NORMANDIE.—*Bizy*.—Having read, in the Memoirs of some of the Agriculture Societies in France, that the marshal duke de Belleisle made a very considerable and successful experiment on the introduction of the culture of silk in Normandie, on his estate at Bizy, I had long ago made a note of it, for examining, as the steps which proved successful in such an attempt in Normandie, might probably have the same effect, if applied in a climate so similar as that of England. I went to Bizy with this view, and did what I could to find out the proper persons, concerned in this undertaking, to give me the information that was necessary.

Five-and-thirty years ago, the duke began by making some extensive plantations of mulberries, to the amount of many thousand trees: they succeeded well; and, in order to draw all the advantage possible from them, as the people in the neighbourhood were ignorant and awkward in the process, the duke, by means of a friend in Provence, procured a man, his wife, and all his children, well skilled in the whole business of the silk-worm, and established them at Bizy, in order to instruct his own people in it. By these means, he made as much silk as the produce of leaves would admit. I wished to know to what amount, but could not ascertain it; but the duke continued his plantations of mulberries during nine or ten years. I tried hard to find out some descendant or remains of this provençal family, but in vain; the man was dead, the woman gone, and the children dispersed; the estate, on the marshal's death, having been sold, and coming into the possession of the duke de Penthievre, made all these circumstances the more difficult. The great object was, the success of the experiment; this inquiry was uniformly answered by several persons:—it had no success at all. It was a favourite project of the Duke's; and supported, with perseverance, for many years, until his death; but the silk did not pay charges: and though he very liberally

berally offered leaves to the poor people, on easier terms than they are supplied with them in the south of France, and even gave trees; yet nothing more was done than what his influence and authority forced: and the Provençal family, after ten years experience, pronounced that the climate would do to make silk, but not with profit. To his last hour, the duke had silk made, but not an hour longer; the practice had taken no root: the country people, by whom alone such an undertaking could prosper, saw no inducement to go into the scheme, and the whole fell at once into utter ruin and neglect on the duke's death; so that the trees themselves were by degrees condemned, and the number remaining at present inconsiderable. Certainly no positive physical proof, that silk will not do in Normandy, but it is a presumptive one, pretty strongly featured. Go into Languedoc, Dauphiné, and Provence, and the poor people do not want the exertions of marshals of France to induce them to breed silk-worms; they have a much more powerful inducement,—the experience that it is their interest: had this inducement been present at Bizy, the culture would, in more than ten years, have taken root.

BOURBONNOIS.—*Moulins*.—Mons. Martin, gardener of the Royal Nursery here, who is from Languedoc, cultivates silk with great success; he was so obliging as to be as communicative as I could wish. Trees of two or three years old, yield a few leaves, but to be stripped cautiously: at eight to ten years, they come very well into yielding. One ounce of *grains*, that is, of the eggs of the worm, requires twenty quintals (one hundred weight English) of leaves, and yields from 7 lb. to 9 lb. of silk. He has made as far as 300 lb. in a year, the produce of 3000 lb. of cocoons; and the worms that year eat 12000 lb. of leaves every day, for four or five days together, and fifty persons were employed for eight days. The whole business of hatching and feeding employs a month; the winding is afterwards done at leisure. For care and attendance of the worms, gathering the leaves, and winding the silk, he gives one-fourth of the produce, or about 6 liv. the pound of silk; for spinning 3 liv.; in all, 9 liv.; rests profit, 15 liv. The men earn 20s. to 24s. a day, and the women 8s. to 10s. He prefers this climate for the business to that of Languedoc, though stoves are here necessary for keeping the room to the temperature of 18 degrees, Reaumur; whereas in Languedoc they do without fires. The season here varies from fifteen to twenty days; the earliest is the 24th of April, and the latest the 15th of May. If the leaves are not ready, he keeps the hatching back, by lodging the *grains* in a cool cellar. He has known one tree in Languedoc yield 80 liv. a year in silk. Moulins and its environs make to the value of 60 or 80,000 liv. a year. Mons. Martin sells trees, of two years old, at 20 liv. the thousand. The distance of planting, if for crops, under the trees, thirty feet;
if

if no crops, twenty feet. Of the writers that have treated of this subject, he prefers Monf. Sauvages.

In the particulars of an estate to be sold, was one article relative to the product of silk; mulberries enough for 12 oz. of grain, yielding 60 lb. of silk.

VIVARAIS.—*Maiffé to Thuyt*.—First meet with mulberries in going south from Auvergne. They yield very largely here; I am assured, that many trees, in a good year, reach 12 liv. each. That in four years after planting, they begin to produce leaves enough for stripping. The best of them are all grafted. Trees, fifteen years after planting, have, in a very good year, yielded 6 liv. I was shewn a small field that yields, one year with another, 120 liv.; I stepped, and found it 50 yards by 70 yards, or 3500 square yards (7l. 4s. 4d. per English acre); yet the trees were not regularly planted, nor fully; and this besides the other produce of the ground.

Aubenas.—The silk mills here, which are considerable, purchase the cocoons of the farmer, at 28s. to 32s. the pound. The mulberry-trees here are very large.

Villeneuve de Bergue.—Twenty quintals of leaves give one quintal of cocoons, and one quintal of cocoons 10 lb. of silk. They reckon that the waste, *débris & dechet*, pay the spinning. Eighteen trees, of seven years age, pay 28 liv. a year; but some trees, of ten years old, have been known to give 3 liv. each. Three-fourths of an arpent de Paris have been sold for 400 liv.; the soil all rock and stone, but calcareous. The trees are grafted before transplantation, which is at three years old; price, 12s. and 15s. each. The second year after planting they begin to gather. The price of the leaves 3 liv. the 100 lb.; and of gathering 10s. the quintal. The culture is reckoned more profitable than vines, which are sometimes grubbed up, to make way for mulberries. Of the sorts, the *rose feuille* is best. In the road to Viviers, I remarked a tree 2½ feet in diameter; and very large ones are in the bed of a torrent, where no earth (only stones) is visible.

DAUPHINE.—*Montélimart*.—Silk is the great produce of the country; they have mills, where the cocoons are bought, at 27s. the pound. An ounce of *grains* gives 60 lb. of cocoons, and 12 lb. of cocoons 1 lb. of silk: forty middling trees, each yielding a quintal of leaves, being required to feed that proportion of worms. The *grains* are hatched by artificial heat, and the operation demands wood to the amount of 24 liv. to each ounce of grains. A common method of conducting the business is, for the proprietor of the land to find trees and half the *grains*; the poor people the other half and all the labour; and the parties divide the produce between them. The impediments in the culture are, —1. climate; frosts in the spring destroy the leaves, and, if at a critical time, there is no remedy. I demanded if they had no succedaneum, in such case, in feeding

feeding the worms with the leaves of some other plants? The answer was, that experiments had been made upon that point, without any success; that the idea, however, was nonsense, for the quantity of food was so great, as to render it absurd to think of providing it, not for a certain want, but merely a contingent one; the expence of such a conduct would absorb all the profit. Nor is it frosts only that are dreaded—great and sudden heats make the worms fall, and they labour very poorly.—2. The extreme labour of attending the worms, is a great objection to the business; it is, for the last fifteen days, so severe, as to kill many; and, for the last eight days, they are cleaned every day.

Upon a comparison of the culture of the olive and the mulberry, it was remarked to me, that one great advantage of the olive, was the contracted space in which the roots feed, consisting chiefly of a tap-root and fibres, which made the crops sown under them good; but a mulberry threw out a profusion of roots, fifteen or twenty feet around, in every direction.

They have been known, at eleven years growth, to yield 200lb of leaves each tree.

The mulberry is found not to like water; for there is in the watered meadows a mound of earth, to keep the water from the roots of these trees.

When silk-worms are ready to spin the cocoon, if they are cut in halves and thrown into vinegar, each worm gives two transparent ligaments, very strong, for making fishing lines, &c. &c.

Loriol.—Mons. L'Abbé Berenger, curé of this place, has given an uncommon attention to this culture; he was so obliging as to give me the result of many years experience on this interesting subject.

Time of Sowing.—There are two seasons; the first, with the fruit, fresh, at the end of June:—the second in May, with the seed of last year, dry; and this is better, because the June sowing suffers sometimes, if frosts are severe, or the weather is both cold and humid. When sown dry, if too early and cold weather succeeds, they are apt to fail. They are often watered.

Transplantation.—In April following, those that were sown in May are transplanted, three feet every way, into the nursery; only half the plants (the best) being drawn, the rest are left till the year after. They are never transplanted a second time.

Sort.—The *feuille rose*, with white or grey fruit, is the best; black fruit not known here, but said to be good for leafing late, and escaping frosts in the spring.

Grafting.—It is best to graft, in the nursery, in May, when they are three years old, at the head, with grafts cut in February preceding, and preserved in sand in a cellar: these grafts are branches three feet long, which are buried in sand, except four inches at the end, for three or four knots to shoot; if all

are

are buried in the sand, all the knots will shoot. At grafting cut off those knots that have shot out, and use the rest. The time is after gathering the leaves of the standard to be grafted, when the plants are 5 feet, or $5\frac{1}{2}$ feet high. One year after grafting transplant, that is, about April. Graft three or four branches.

Soil.—Good and humid sands, and sandy loams are the best: warm, forward, rich, and friable: rocky and stoney soils do well; but all clays are bad. On the lightest stoney lands, the trees come into bearing much sooner than in the rich vale, but these last vastly longer; on the rich vale land, two hundred years are a common age for them.

Planting.—In bad land plant at eighteen feet square, in moderate at twenty-four, and in very good at thirty-six; and, after seven or eight years, there can be no crops under them, if at these distances. There are two sorts of trees, the one large standards; and the others dwarf ones, which they call *murier nain*; an arpent contains, of course, many more in number of these than of the others; and they yield, for the first ten or fifteen years, a larger produce, but afterwards the greater trees are more productive. The dwarfs are best for being set in rows, for ploughing between; they are grafted at $1\frac{1}{2}$ feet high; are never watered. The price of trees 25*s.* the hundred, at the age of one or two years; the great trees, at four or five years, for grafting, 20*s.* each, at present 15*s.* each, and grafted. The operation of planting is performed by digging a hole 6 feet square, and $2\frac{1}{2}$ or 3 feet deep; and they commonly lay dung upon the roots.

Cultivation.—The attention with which they manage the trees after planting, merits the highest commendation:—after they have been planted two years, a trench is dug around each tree, about two feet deep, which is left open all winter, and filled up again in the spring; the year following another is dug, more removed from the tree, which is managed in the same manner; and so on every year a trench, till the whole land is stirred as far as the roots extend. This appears to be a most excellent system, and preferable to trenching the ground at first; as in that way much of it is consolidated again, before the roots of the young trees reach it.

No crops whatever to be sown on the land after the trees are of a size to have their leaves gathered; as much is lost in leaves as is gained by such crops.

The trees should never be pruned at any other season than March, and but once in two years; the wood pays the expence: they receive one digging per annum, at 6 liv. and a hoeing, at 3 liv. per arpent.

There is another admirable practice known here, and used by all skilful cultivators, which is, that of washing the stems of the trees every year, in May,

for four or five years after planting. Monf. L'Abbé Berenger always practises this with great success.

Produce.—For the benefit of the young trees, they ought not to be stripped for seven or eight years after planting into the field; they will pay well afterwards for this forbearance; but the practice is not common. I viewed a young plantation of Monf. Blanchard, at present in the National Assembly, who is famous for his attention to his mulberries; the trees were six, seven, and eight years old, and none of them had ever been stripped, and their appearance was very flourishing. Monf. L'Abbé Berenger approves the practice, but has not adhered to it; his trees, however, are very fine, and do not complain; one plantation, of eight or ten years growth, that have constantly been stripped, are, notwithstanding, very fine. There are forty on 400 toises of land, that this year produced, each tree, 8 lb. of leaves. The beginning of February he planted the land under them with potatoes, which were dug in August, and produced 40 quintals; among these potatoes maiz was planted in April, in squares of five or six feet, and the produce of that will be five or six quintals, at 8 liv. the quintal. He shewed me another plantation, of an arpent, of very fine and flourishing dwarf trees, which yielded this year 8 lb. of leaves each tree, and 300 lb. on the arpent. They are ten years old; no crops have ever been sown under them.

The produce of leaves may be estimated at 50 lb. from a tree of a toise square. The greatest produce known is 10 quintals, from a tree of fifty years old. At twenty years the medium is two quintals. They increase till sixty years old; but are in good perfection at twenty.

The eggs.—A paper of nine inches by fifteen inches, covered with small leaves, stuck full of worms, gives one quintal of cocoons; and this is what they call one ounce of *grains*. But proportions will not hold, for the produce is not increased proportionably to an increase of quantity.

Hatching.—Retarding the hatching of the worms with particular views, is, in many circumstances, impossible. When once the heat of the atmosphere is come to a certain pitch, the hatching cannot be retarded by cellars. Monf. Faujas remarked, that in June they would hatch in an ice-house; which shews that at a certain age they will hatch in spite of cold. They never, however, trust to the natural heat for hatching them, which always does it too slowly; it is done with the assistance of fire, and in the month of May. They begin to hatch at 20 to 22 degrees (Reaumur); but artificially it is done at 24 degrees. When the eggs happen to have been put in a cellar, at 10 degrees, their common temperature, they afterwards hatch with difficulty, and never well; always best when they have to undergo but a moderate change.

Feeding.

Feeding.—In this business all sorts of food, except the mulberry-leaf, is rejected, at the first mention, as the most ridiculous, impracticable, and impossible idea, that ever entered the head of a visionary; and never could be conceived but by those only who amuse themselves with a few worms, without taking the trouble of calculating quantity, expence, and quality of silk.

For one ounce of grain, a room of 10 feet by 14 feet, and 12 feet high, is necessary; but the larger the better, and with windows only to the north. There should be ten tables, or shelves, 6 feet long, and $4\frac{1}{2}$ feet broad, one 18 inches above another; the first expence of which 60 liv.

Till the 18th of April there is here no security against frosts. Two years ago there were many leaves before that day, and most people began their operations; the leaves were all cut off, and they lost the year entirely, for it is three weeks before the leaves come again. Mons. L'Abbé Berenger would not trust appearances; did not begin till after that day, and had as good a year as at any other time.

The expences are usually borne between the parties, and amount to half the produce, not including the keeping the utensils in repair. But if they are paid by the owner of the mulberries, some of them amount to as follow:—gathering the leaves, 12s. to 15s. the quintal; for gathering the dwarfs, only half the price of the others; wood, 15 liv. for 1, 2, or 3 oz. of eggs in one room; 30 liv. for 6 oz. because in two rooms; 22 liv. 10s. for labour in the house; spinning, 40s. per lb. of silk. The waste is worth 20s. therefore the expence is 20s.

For the last four or five days, eight men are necessary to gather leaves for 20 oz. of grain, their voracity being incredible the latter part of the time.

The price of the leaves, if bought, is 4 liv. to 5 liv. the quintal, never at 3 liv. but has been at 10 liv. From 15 to 18 quintals of leaves give one quintal of cocoons, and one of cocoons gives 9 lb. of silk. Cocoons are sold at 26s. the pound; silk, on an average, at 19 liv. The leaves, dissected by the worms, are dried, and kept for hogs, sheep, &c. being worth 4 liv. the quintal; and an ounce of grain yields two quintals of such: and the dung of the worms, from an ounce, is worth 4 liv. more, being excellent; the best indeed of all others.

Two brothers here, Messrs. Cartiers have had as far as 80 quintals of cocoons. Mons. Berenger's three hundred trees on an arpent, at 8 lb. of leaves each, are 24 quintals; and, at 4 liv. the quintal, amount to 96 liv.; and as 16 quintals of leaves give 9 lb. of silk, at 19 liv. it is 171 liv. and for 24 quintals 256 liv. the half of which is 128 liv.; hence, therefore, to sell the leaves at 4 liv. the quintal, does not answer equally with half the produce (128 liv. per arpent de Paris, is 6l. 4s. 3d. per English acre).

PROVENCE.—*Avignon.*—At ten years growth the mulberries yield a considerable produce; at that age they give 100 lb. to 150 lb. of leaves, but not

common. For one ounce of grain, five or six very large trees are necessary; or, if the leaves are bought, to the amount of 24 liv. to 30 liv. The ounce will give from 40 lb. to 50 lb. of cocoons, or 5 lb. of silk; but more commonly 12 lb. of cocoons for 1 lb. of silk. Gathering the leaves, 10s. or 12s. the quintal, one with another, dwarfs and standards. The waste pays the spinning.

Aix.—Mulberries, beyond all comparison, more profitable than olives; will give 3 liv. or 4 liv. per tree, more regularly than olives will 10s.; but the great plantations of olives are on barren rocks that will not do for mulberries.

Tour d'Aigues.—One ounce of grain requires 15 quintals of leaves, and gives 50 lb. of cocoons; that is, 50 lb. in a small undertaking, like the house of a poor family; but not more than 30 lb. in a large building. Monf. the President has, however, had 75 oz. of grain that gave 40 lb. one with another: 14 lb. of cocoons give 1 lb. of organzine silk.

On good land, twenty trees, of ten years old, will give 15 quintals of leaves. The waste, with the addition of 10s. per lb. will pay the spinning. Wood is 12s. the quintal, and 1½ quintal will wind and spin 1 lb. of silk: and one quintal of charcoal will make 3 lb. of silk. The common calculation is 10 quintals of charcoal for 1 oz. of grain.

Labour and fuel, 40s. per lb. of silk, exclusive of gathering the leaves; but the common method is to find the trees and the grain, and give half the produce for all the rest. The whole business, exclusive of winding and spinning, employs exactly a month.

Hyerès.—This article is here but little regarded; the number is not considerable, nor do they pay nearly the same attention to them as in Dauphiné. A tree of twenty years pays about 30s.; and some, of a very great size and age, 6 liv.

Frejus.—Close without the town, on the banks of a small canal of irrigation, are five or six of the largest mulberries I have seen, growing close to the water's edge; from which it should appear, that they have here none of that objection to water which was mentioned to me at Montélimart.

Estrelles.—At the inn here there is a mulberry-tree which yields black fruit, and leaves of a remarkable size. I asked the master, if he used them for silk-worms? Never, he replied, *they are no better for them than elm, oak, or pine leaves: it is the white mulberries that are for worms.* So inaccurately understood is this point, even in the silk countries; for in Languedoc they told me, all sorts were given indiscriminately. This tree would be worth 2 or 3 louis a year.

To these notes, taken by myself, I shall add a few others, for the more general elucidation of the subject.

Languedoc

Languedoc yields, in a common year, from 500 to 1200 quintals of silk*. I have searched books in vain for information of the quantity of silk produced in all France; but I find the number of looms which work it, by one account, 29,000†, of which 18,000 at Lyons; but by a later and more authentic account, there were at Lyons only 9335 looms, which worked about 2,000,000lb.‡ and in all France 17,500 looms; which, in the same proportion, would work about 3,763,000lb. In 1784, she imported raw silk to the value of 29,500,000liv. and in 1787, to 28,220,000 liv.; call it 29 millions, and 20 liv. the mean price per lb. it is 1,450,000lb.||; which will leave about 2,310,000lb. for the home produce, or 46,200,000liv. which is so gross an impossibility, as to ascertain to a certainty, the exaggeration of the number of looms, and confirms, in a fresh instance, the many errors in the new Encyclopædia. If Languedoc produces only 100,000lb. all the rest of the kingdom cannot produce twenty times as much; for the culture is confined to three or four provinces, except small quantities, that enter for little in a general account. I was informed, at Lyons, that the home growth was about a million of pounds weight, of two-thirds of the value of the imported per lb. or about 20 liv. This makes the growth to the value of 20,000,000liv. or 875,000l. If so, Languedoc must produce more than 100,000lb. for that province must be at least one-fourth, if not one-third of the whole. I must confess I have my doubts upon this point, and think that even one million of pounds much exaggerated, for I crossed the silk country in more than one direction, and the quantity of trees appeared inconsiderable for any such produce. But admitting the authority, and stating that the kingdom does produce to the amount of 8 or 900,000l. sterling, I must remark, that the quantity is strangely inconsiderable, and seems to mark, that the climate has something in it vastly inferior to that of Italy, for the production of this commodity; in which country there are little principalities that give more than the whole kingdom of France;—yet, to human feelings, there is no comparison between the climate of France and that of Italy; the former is better, beyond all question. But the spring frosts (found in Italy also) are what bring the greatest destruction on this culture, and will for ever retard its progress greatly in countries exposed to them. In 1788, there was a general failure in the south of France, yet across the Pyrenees, in Catalonia, the crop was abundant, merely because the spring frosts did not pass those mountains.

* *Considerations sur le Commerce de Bretagne*, par Monsr. Pinczon du Sel des Monsr. 12mo. p. 5.

† *Lettre sur les Muriers & Vers a soie Journal Oeconomique*. 1756. vol. ii. p. 36.

‡ *Encyclop. Methodique Manuf.* tom. ii. pt. 2. p. 44.

|| A very late writer was strangely mistaken, in saying, that France imports 20,000,000 of pounds weight. *Mr. Townshend's Journey through Spain*, vol. i. p. 52.

In the districts and spots of the southern provinces, where the climate has, from experience, been found favourable to silk, there is no want of exertion in following it; and about Loriol and Montélimart, it is cultivated with more energy than in any part of Lombardy, yet at small distances there are no mulberries, though the proprietors are as rich and as industrious as where they are found. The same observation is to be made every where, and seems to mark a great dependence even on the locality of climate, if I may hazard such an expression. Where the culture succeeds well, it appears, from the preceding minutes, to be highly profitable, and to form one of the most beneficial objects that can attract the attention of the industrious.

The Society of Arts at London, have, for many years, offered premiums for mulberries and silk in England; and much has been written and argued in favour of the scheme, which I take to be a great, but harmless folly: it may mislead and deceive a few ingenious speculative people, who may, for what I know, in the course of a century, arrive at such success as the late King of Prussia boasted, that of making a few thousand pounds of miserably bad silk, after forty years exertion. Such success is a real loss; for the same attention, time, capital, and encouragement, given to productions natural to the climate, would have made twenty times, perhaps an hundred times, the return. That silk may be made in England I have no doubt; but it will be made on the same principles, and attended by the same dead loss. The duke of Belleisle made silk, in Normandy, and if he had been a great sovereign, his hundreds would have been thousands of pounds; but all was loss, and, therefore, the sooner it dropped the better. Another duke failed, not quite so much, in the Angoumois; and a third planted mulberries to loss on the Garonne; his neighbours did the same, but grubbed them up again because they did not answer. At Tours, the finest climate of France for fruits, and by consequence well adapted for mulberries, they succeed tolerably, but the culture does not increase, which carries with it a presumption, that more steady heat in spring is wanted than the northern provinces of France enjoy. Such circumstances bear with great force against any ideas of silk in England, where the heat is never steady; and least of all in spring, where late frosts cut off vegetables much harder than the mulberry, even so late as the end of May and beginning of June; and where I have seen potatoes turned black by them, even on Midsummer day.

The minutes are invariably decisive, on the question of feeding worms with any thing but mulberry leaves; the utter impracticability of that scheme is shewn in a manner too satisfactory for any doubts to remain; and the difficulty of retarding the hatching of the worms beyond a certain period, though not proved with equal decision, is yet placed in a light not a little questionable. It is upon these two modifications of the common practice, that silk in England confessedly depends;

one

one of them is a vague groundless theory; and the other too uncertain to be relied on. But I must further remark, that frosts, in such a climate as England, as well as abroad, are to be looked for *after* the leafing of the mulberry; and consequently, that the power of retarding the hatching of the eggs would be useless; the worms in that case must be put upon other food, which, with small parcels, would make bad silk, and with large ones would demand an expence impossible to submit to every year for a mere contingency that might be demanded only once in three or four. To urge the example of Brandenburg is idle: in the first place, all continental climates are more regular than insular ones, and therefore the climate of the King of Prussia's dominions may be better for the business; yet with this advantage Normandy failed. In 1788, that is, after forty years exertion, they made, in all the Prussian territories, 11,000 lb.* of pounds lighter than French ones. And the author I quote on this subject, who commends the project, informs us, that in Brandenburg, to make a pound of silk, demands one-fourth more cocoons than in the south of France †; and that the silk thus made, is so bad, that it will do only for certain objects ‡; of the climate he says, that it is not favourable enough § for the business. What encouragement is to be collected from this detail, when it is considered that forty years effort of the first talents in the world, seconded by boundless power, forcing plantations and lavishing premiums, have been able to drive this nail, that will not go but against nature, to no greater extent than 11,000 lb. of bad silk in all the Prussian dominions? In my opinion, the result of such an experiment yields a more complete condemnation, than if it had never been tried at all in such a climate, and ought to be a lesson to us in England, not obstinately to persist in such foolish attempts, calculated only to bring ridicule on societies, and disappointment to individuals. In all probability, the silk made in Prussia cost every year ten times more than it is worth; that is to say, the same royal attention, the same premiums, the same favours, as giving trees and silk eggs,—the same powerful instigations to rectors and cureés of the crown livings, &c.—had they been exerted to people the heaths of Brandenburg with sheep, would have yielded, in *wool alone*, ten times the value of 11,000 lb. of silk; which, if we value it 12s. a pound, being so inferior, amounts only to 6600l.;—a pretty article of produce for forty years efforts of the most energetic government in Europe! 50,000 sheep, at 3s. a head in wool, go much beyond it, throwing mutton out of the question.

An idle error in England, is the idea that this culture demands the labour only of women and children, and old and infirm persons: the contrary appears

* *Mirabeau Monarch. Pruss.* tom. i. p. 180. † Tom. ii. p. 166.

‡ Tom. i. p. 180. § Tom. ii. p. 166.

the fact; eight men are necessary for gathering the leaves for twenty ounces of grain, during four or five days, when the worms are most ravenous: and the work of gathering is that of men at all times; for the leaves are not *picked*, but *stripped* along a branch, by force and hardness of hand. And even the feeding and cleaning worms is so far from being light work, that it is, on the contrary, very severe, so as even to kill some of the poor people that follow it up; as the industrious will follow up all work severely. The culture is therefore very far from what it has been represented in England, as being all net profit, demanding only women, children, and the infirm; on the contrary, it would demand many able men, at a busy season of the year, when they could be ill spared; and if a proposal was to be made at such a season to a farmer, that he must spare men enough to gather all the leaves of many hundred pollard trees of any sort, he would probably say the price of mulberry leaves in the silk countries would not pay him; and that double that price would not be an inducement to him, at such a season, to derange his business, and take his men from necessary work, for employing them on such a business. If it is asked, how the same thing can be done in silk countries? I answer, that labour is but half the price of English labour, owing to causes explained in other chapters; that the multiplied subdivision of landed property fills many of those countries with hands,—many idle, and many not half employed. To them the culture is highly valuable; but to introduce it in a country, even if the climate would permit, constituted and politically arranged, in a manner and upon principles absolutely contrary, would be attended with difficulties and expences, not in the contemplation of people very ingenious, perhaps, who have amused themselves with silk-worms, and paid an attention to them, being a pleasure, which, if commercially valued, would possibly amount to fifty times the value of all the silk they make.

CHAP. XII.

Of Cattle in France.

EVERY part of agriculture depends so immediately on the quantity of live stock, that a farming traveller cannot give too much attention to so material a part of his pursuit. The candid reader will not, however, look to any traveller, that does not reside long in a place, for such information, as is alone to be acquired by such residence. He who stays a week will gain knowledge beyond the attainment of a day; and the attention of a month will produce fruits beyond the reach of him whose observations are limited to a week, and yet remain very superficial, when compared with the researches of others who live on the spot. A mere traveller should gain what his opportunities allow, and what he is thus able to gain is not the less valuable, because larger powers would have commanded a greater harvest.

PAYS DE BEAUCE.—*Toury, &c.*—Their best cows sell at 150 liv.; they give twelve or thirteen bottles a day.

Orleans.—They have a remarkable custom of letting chick-weed get a head in their vineyards, which they pluck in May and dry. This they boil in water with bran for their cows, giving it thrice a day, and find that it makes them give double the quantity of milk they would do on any other food. This application of a common plant, that might easily be cultivated, and got off time enough for a crop of turnips, probably improving the land, deserves a trial. The fact is curious.

SOLOGNE.—*To La Ferté.*—Make hay of the weeds of their vineyards, and are the chief support of their cows; do not boil, but give them in bran and water. In summer feed with grass and vine cuttings.—A cow, that gives one to three bottles a day, sells at 90 liv.

La Fuzelier.—The cows small, and very like Alderneys. Plough bullocks of the same breed.

BERRY.—*Verfon.*—A pair of oxen, ready to work, sell at 400 liv. (17l. 10s.); and when old and past labour, but lean, 300 to 340 liv.

Argentan.—A good pair of oxen sell at 400 liv.; common ones 300 liv.; very fine to 600 liv. (26l. 5s.) All the cattle here are cream coloured, as well as the droves we have met going to Paris.—A cow, not the largest, sells at 150 liv. (6l. 11s. 3d.)

LA MARCHE.—*To Boismandé*.—Very fine bullocks, well made, and in great order, 600 liv. (26l. 5s.) the pair. These oxen are of a beautiful form; their backs strait and flat, with a fine springing rib; clean throat and leg; felt well; and are in every respect superior to many breeds we have in England.

La Ville Aubrun.—Work their cows, but they do not give as much milk as if not worked. A good one sells, with its calf, at 150 liv. (6l. 11s. 3d.) They fatten oxen here with *raves*, a sort of turnip; begin to use them in October or November, and last generally about three months. To fatten a pair of good oxen would take 45 cart loads, cut in pieces, and 20 quintals of hay: when the raves are done, they give the flour of rye or other corn, with water enough added to form a paste; this they leave four or five days to become sour, and then they dilute it with water, thicken it with cut chaff, and give it to the oxen thrice a day; when fed with raves the oxen do not want to drink. Such a detail would imply a turnip culture of some importance, but though hoeing is not absolutely unknown, yet the turnips may be conjectured, from the common management, being never to hoe, fearing to cut up the crop by it. The young plant is sometimes eaten by the fly, in which case they sow again; frost sometimes damages the roots, but never destroys them entirely. Often sow wheat after them, and do not cultivate clover; thus three-fourths of the merit of the culture is lost.

Bassie.—Their raves yield, according to the year, two or three cart loads per boiserée of land, about eight of which make an English acre. A pair of good oxen will eat a cart load in two days, but have hay with them: they are as fond of this root as horses are of oats: they finish with flour of rye, mixed as before-mentioned: they assert that the oxen like it the better for being sour, and that it answers better in fattening them. They eat about a boiseau a day (weighs 22lb.) and never give this acid liquor without chopped hay. It is proper here to remark, that, in coming to Paris, we have met a great many droves of these oxen, to the amount, I guess, of from twelve to fifteen hundred, and that they were, with few exceptions, very fat; and, considering the season, May, the most difficult of the year, they were fatter than oxen are commonly seen in England, in the spring. I handled many scores of them, and found them an excellent breed, and very well fattened.

LIMOUSIN.—*To Limoges*.—A pair of good oxen will eat a cart load of raves a day; begin to feed the end of October: after the raves, give rye-paste as described above, but with the addition of a *leven* (*levain*) to the paste, to quicken the fermentation, and make it quite sour: at first the oxen will not drink it, but they are starved to it; usually take it the second day, and after they have begun like it much, and never leave a drop. Saw a pair bought last winter for 1100 liv. (48l. 2s. 6d.); but such as are ready for work, sell as dear as fat ones, which is remarkable. An arpent of raves yields forty cart loads; and a pair of good oxen

will

will eat one load a day. They have two kinds; one very large and flat; the other more round, and with a root that enters the ground deeply. They generally manure thoroughly for them, in March, and plough in so early, that the dung may be quite rotten and mixed with the soil by the end of June. Begin to sow a fortnight after Midsummer: they are not hurt by the frost when it thaws with rain, but are apt to rot when it thaws with the sun. About Christmas they plough up the part eaten, and sow rye, the rest for oats.—They plough their cows, milking them once a day, from three to five bottles.

Limoges.—The great staple of the whole province is fat cattle, sent to Paris and other towns, as well as hogs, that go for salting to the sea ports. The cattle are all of a yellow cream colour, with no other distinction than having, one in an hundred perhaps, a tendency to a blood red: all have horns of a medium length; legs short in proportion to their carcasses, which are deep and heavy; the shape in general very good; the back strait and broad; the rib springing, and consequently well arched; the hips and rumps very fat; the tail rising high from the rump; which I note, not because such points are of *real* importance, but because it is esteemed by some as a proof of a bad breed: the weight I guess to be from sixty to seventy stone (14lb.); some rise to eighty, and a very few may be so low as fifty. Their hogs are many of them large: some with lop ears like our old Shropshire's.

St. George.—The same breed of oxen continues here, but hardly so large; they are always kept in high order: a pair draws the weight commonly of 2000lb. and supports such labour well. They rear calves by keeping them eight or ten months with the cows.

Ufarch.—Fatten their oxen with raves, as above, and then with rye-flour, made into a paste with leaven, and given four, as before described. They also fatten some with potatoes, mixed with chestnuts, and also alone; but in either case boiled thoroughly, and given fresh as boiled every day. They have a great opinion of their fattening quality: they feed their cows also with this root, and find that it gives a great increase of milk.—Calves reared, either for oxen or cows, suck ten or twelve months, which is the universal practice.

QUERCY.—*Brive to Cressensac*.—A practical farmer, that has the largest oxen I had met with, gave me the following account:—they fatten with maiz, but, in order to render it tender, pour boiling water on it, cover it up close, and give it to the cattle the same day; and in this method it is a most excellent fattener, both of oxen and poultry. But, in order to make them fatten sooner and better, this farmer gives them, every night, and sometimes of a morning, a ball of pork-grease, as large as an apple; he says this is both physick and food, and makes them thrive the better.

To Soulliac.—Fat their oxen here also with raves, and give them also to lean beasts; the master of the post town were we stopped says, that he sent last year to Paris, four raves that weighed 100lb. They soil their oxen with crops of the *vicia latharoides*, and of the *lathyrus setifolius*; of these plants he spoke so highly, when given in the soiling way, in the stable, that he said the oxen became so fat, that they could not get out of the stable if they were not worked. He shewed me some oxen that did not allow a doubt of the truth of what he said, for they were as fat as bears. The fact of hog's grease being given, was here confirmed; it is given to increase the appetite, and answers so well, that the beasts perfectly devour their food after it, and their coats become smooth and shining. The most fattening food they know for a bullock, is walnut oil-cake. All here give salt plentifully, to both cattle and sheep, being but 1s. a pound. But this practice is, more or less, universal through the whole kingdom.

Cahors.—Nearly all the draft cattle are mules, and yoked as oxen in England, only collars to the yoke instead of bows. Cows and oxen all cream-coloured; very good, and in fine order.

LANGUEDOC.—*Toulouse.*—Very fine cream-coloured horned oxen; a pair good working ones sell at 25 louis.

St. Gaudents.—Price 120 liv. (5l. 5s.); in the winter kept in stables, and fed upon hay.

Bagnere de Luchon.—Every parish in these mountains has common pastures for their cattle and sheep, and each inhabitant has a right to send as many as they can feed in winter. They are on the mountains three or four months, under the care of people who milk the cows, goats, and ewes, and give the proprietor, at the end of the period, two cheeses, of 18lb. for each cow; or four goats; or ten ewes; the price of the cheese is 5s. the lb. but 10s. at a year old, and the overplus, if any, is their reward. A cow is reckoned to pay above 2 louis a year, valuing the calf, as they do, at a louis. A pair of cows, stout enough to be worked, sell at 10 to 12 louis; and a pair of oxen 12 to 15 louis.

BASQUE.—Informed by a gentleman, at Bagnere de Luchon, that the mountains in this province afford a very great supply of food, in summer, for cattle, which are sent to winter on the *landes* of Bourdeaux, where they just get a living on weeds, rough grass, branches of trees, &c.; and that they pay only 5s. a head for wintering these cattle, which is perfectly incredible; but I note it as reported. He also informs me, that those mountains of Basque, and also of Navarre, breed most of the oxen that I saw in Limousin; they are sold thither calves; and are all cream-coloured, or yellowish.

LANGUEDOC.—*Pinjean to Montpelier.*—Ploughing with fine large oxen, in good order; some cream-coloured, others deep red; middling horns. The
same

same breed has been found all the way, almost from the Loire to Barcelona; and from Calais to the Loire, variations of the short-horned Alderney, or Norman cow.

BEARN.—*Navarens*.—Cream-coloured cows, 100 liv. to 120 liv.

GASCOIGN.—*St. Palais to Anspan*.—In 1786, on these mountains, the scarcity of forage being very great, they cut much fern and made hay of it, and it answered well; horses, mules, and young cattle, eat it freely; but it was cut early. Through this country, and nearly to Bayonne, they fatten oxen with raves, which they cultivate carefully for an after-crop. They answer perfectly well, without other food being given; when the raves are done, they sometimes give maiz-flour, but dry, knowing nothing of the Limoufin method.

Port St. Marie.—Very fine cream-coloured oxen.

Aguillon.—Ditto, very fine and beautiful.

Tonnium to La Morte Landron.—As we advance on the Garonne, the oxen are yet finer; meet common ones at 600 liv. and 700 liv. the pair; but some very fine that rise to 1000 liv. and 1200 liv. (52l. 10s.) as they are in the plough; all are, however, in fine order, and many fat. Breed their own cattle; a pretty good cow sells at 250 liv.; harness and work them as oxen, but gently while they give milk.

La Réole.—Work their cows: put oxen to work at three years old, and keep them to it four, eight, and even ten years, according as they are found fit for it. Rise in price to 1200 liv. the pair. The least weight they are put to draw, is 20 quintals (a ton English) a pair; but good oxen draw 30 quintals with ease: all harnessed by the horns; they are fed now upon maiz leaves, which are so excellent a food for them, that it is sown in succession thickly for mowing for soiling. Give also at present vine leaves, which are very good food. See them shoe an ox; they are fastened by the horns in a shoeing stall, and lifted from the ground, if wanted, by two broad bands of hemp, that pass under the belly. The shoe turns over the toe, or hoof, as in England; shoe for ploughing as well as for the road.

Barjac.—Oxen, through all this country, where they are found fine, are dressed as regularly every day as horses.

ANGOUMOIS.—*Barbeseux to Petignac*.—Cream-coloured oxen; 20 louis to 25 louis the pair.

POITOU.—*Poitiers*.—Red-coloured oxen, with a black tinge in the head; the sign of the Poitou breed.

Chateaurault.—Good cream-coloured and red oxen, but they have declined since Bourdeaux. The good ones here sell at 25 louis the pair. They plough with a pair, without driver or reins.

Amboise.—Cream-coloured, and some blackish; and, which shews we are got to the Loire, some Norman ones, with mixtures. This great river is the separation

separation of breeds in a remarkable manner. All the way from Tours, to Blois, they raise raves for cows and oxen, but never hoe them; and the scale not at all respectable.

Petiviers.—Cows quite the Norman breed, and the earth tilled by horses.

ISLE OF FRANCE.—*Liancourt*.—Exceedingly deficient. Some poor ill fed cows upon the commons were all that I saw, except the Dutchess of Liancourt's dairy of Swiss cows. Of oxen and fattening beasts they have none. Very fine fat beef appeared at table, which came from Paris, I think.

Brasseuse.—Madame la Viscountesse du Pont's dairy of cows fed entirely with lucerne, and the butter excellent; I admired it much, and found the manufacture quite different from the common method. The milk is churned instead of the cream. Her dairy-maid is from Bretagne, a province famous for good dairy-maids. The evening's milk and the morning's are put together, and churned as soon as the latter is milked; the proper quantity of salt is added in the churn, and no washing or making in water, which these dairy-maids hold to be a very bad method. Finer butter, of a more delicate flavour, was never tasted, than procured by this method from lucerne.

Comerle en Vexin.—This part of the province is famous for fattening calves for the Paris market. I had gathered some circumstances at Marenne, and they were confirmed here. All is known at Paris under the name of Pontoise veal, but it comes chiefly from this country. The farmers here are mostly, if not all, in the system of suckling. The cows are of the Norman short-horned breed, nearly resembling our Alderney; those of three considerable farmers, whose herds I viewed, were so unexceptionably. The management of their cows is to keep them tied up constantly, as far as food is concerned, but turned out every day for air and exercise, during which time they pick up what the bare pastures yield. Their food is given in the houses, being soiled on lucerne, sainfoin, or clover, mown fresh every day, while they give milk, but hay and straw in winter. The calves also are, in general, tied up in the same house; those I saw, both cows and calves, were all littered; but they seemed to have so little attention to keep them clean, that I enquired the reason; and was told, that they are sometimes suffered to rest on their dung till it rises high, by the addition of fresh straw, but that no inconvenience is found from it. Having been assured that they fed their calves with eggs, for giving reputation to the veal of Pontoise, I enquired into the truth of it, and was assured that no such practice was known; and that the reason of the superiority of the veal of Pontoise, to that of Normandy, from which province most of the other calves come, was simply that of making them fatter by longer sucking; whereas the Norman custom was to feed them with skim milk. In this country of the Vexin, they are in the custom of keeping them till they are of a large size: I saw some of

four

four months old, valued at 4 louis each, and that would be worth 5 louis in another month; some have been sold at 6 louis; and more even than that has been known. I felt one calf that sucked the milk of five cows. It was remarkable to find, that the value of many fattening calves I examined was nearly what it would be in England; I do not think there was 5 per cent. difference. They never bleed them to whiten the flesh, as is done with us. Some of the farmers here keep many cows; Monf. Coffin, of Commerle, has forty, but his farm is the largest in all the country; the country people say it is 20,000 liv. a year.

PICARDIE.—*St. Quintin*.—All the way from Soissons hither, the cattle are some black, and black and white, which is very uncommon in France.

Cambray to Bouchaine.—Feed their cows, and fatten oxen and cows, on carrots. They reckon that no food is so good, for giving much and excellent milk. For fattening an ox they slice them into bran: but they remarked, that in fattening, the great object was to change their food; that a middling one, with change, would go further than a good one without; but in such change, carrots rank very high.

FLANDERS.—*Valenciennes to Orchies*.—Finding that they fed cattle with linseed-cakes, I inquired if they used any of their immense quantity of coleseed-cakes for the same use? And was assured that they did; and that a beast, with proper care, would fatten on them, though not so well as on linseed-cake; also that they feed their sheep with both. For fattening beasts and for cows, they dissolve the cake in hot water, and the animal drinks, not eats it, having various other food given at the same time, as hay, bran, &c.; for there is no point they adhere to more than always to give variety of foods to a fattening beast. Their cows, of which they are very proud, are Dutch; not large, though bigger than the Norman breed; they are red, or red and white, with a few black; the horns short and curled inwards, forward. They are fed in the house the whole year round, but kept clean with the greatest attention. They boast of their butter being equal to any in the world; and I was assured of a cow that gave 19 liv. (16s. 7½d.) in butter every nine days. They feed them with potatoes, which give excellent butter; and with turnips, which give as bad. Cows sell at 150 liv.

To Lille.—All the cattle tied up in houses, as they assured me, the year round; I inquired into their motives for this, and they asserted, that no practice is, they think, so wasteful as letting cattle pasture abroad, as much food, or perhaps more, being spoiled than eaten; the raising dung also is a great object with them, which stands still, to their great loss, when cattle are abroad.

Their cows were now (November 4,) feeding on turnips and cabbages. In every cow house I saw a tub of bran and water, which is their principal drink; boiled

boiled with bran in it is greatly preferred, but some give it without boiling. Such minutiae of practice seems only possible on a little farm, where the hands are very numerous compared with the quantity of land; but it merits experiment to inquire, how far boiling all the water drank in winter can answer. Without experiment, such questions are never understood. All the cows I saw were littered, but the floors being flat, and without any step at the heel, they were dirty.

NORMANDIE.—Neufchatel. There are dairies here that rise to fifty cows, the produce of which in money, on an average, rejecting a few of the worst, is 80 to 100 liv. including calves, pigs, butter, and cheese. In winter they feed them with straw; later with hay; and even with oats and bran; but not the least idea of any green winter food. The vale from hence to Gournay is all full of dairies, and some also to Dieppe. One acre of good grass feeds a cow through the summer.

To Rouen.—Good cows give three gallons of milk a day; they are of the Alderney or Norman breed, but larger than such as come commonly to England.

Pont au Demer.—Many very fine grass inclosures, of a better countenance than any I have seen in France, without watering; grazed by good Norman cows, larger than our Alderneys, but of the same breed: I saw thirty-two in one field. In the height of the season they are always milked three times a day; good ones give three English gallons of milk a day. A man near the town that has got cows, but wants pasture, pays 10*s.* a day for the pasturage of one, which is a very high rate for cattle of this size.

Pont l' Eveque.—This town is situated in the famous Pay d'Auge, which is the district of the richest pasturage in Normandy, and indeed of all France, and for what I know of all Europe. It is a vale of about thirty-five miles long, and from half a mile to two miles over, being a flat tract of exceedingly rich land, at the bottom of two slopes of hills, which are either woods, arable, or poor land; but in some places the pasture rises partly up the hills. I viewed some of these rich pastures, with a gentleman of Pont l'Eveque, Monf. Beval, who was so good as to explain some of the circumstances that relate to them. About this place they are all grazed by fatting oxen: the system is nearly that of many of our English counties. In March or April, the graziers go to the fairs of Poitou and buy the oxen lean at about 240 liv. (10*l.* 10*s.*): they are generally cream coloured; horns of a middle length, with the tips black; the ends of their tails black; and tan coloured about the eyes, which are the distinctions of the Poitou breed. At Michaelmas they are fat; and sent to the fair at Poissy, that is Paris: such as are bought in at 240 liv. lean, are sold fat at 350 to 400 liv. (15*l.* 6*s.* 3*d.* to 17*l.* 10*s.*) An acre of good pasturage carries more than one
of

of these beasts in summer, besides winter fattening sheep. This acre is 4 verges, each 40 perches, and the perch 22 feet, or a very little better than 2 English acres. The rent of the best of these pastures (called *herbages* here) amounts to 100 liv. (41. 7s. 6d.) per Norman acre, or nearly 21. 3s. 9d. the English; the tenant's taxes add 14 liv. (12. 3d.) or 6s. 1½d. per English acre. The expences may be stated thus:

Rent,	- - - - -	100 liv.
Taxes,	- - - - -	14
Suppose 1½ ox fattened, bought at 240 liv.		360
		<hr/>
		474
Interest of that total,	- - - - -	23
		<hr/>
		497
Say,	- - - - -	500
		<hr/>
Ox and an half fat, at 375 liv.	-	562
Expences,	- - - - -	500
		<hr/>
Profit,	- - - - -	62
		<hr/>

Which is about 11. 6s. 6d. per English acre profit; and will pay a man well, the interest of his capital being already paid. As these Norman graziers are generally rich, I do not apprehend the annual benefit is less. In pieces that are tolerably large, a stock proportioned to the size is turned in, and not changed till they are taken out fat. These Poitou oxen are for the richest pastures; for land of an inferior quality, they buy beasts from Anjou, Maine, and Bretagne. The sheep fed in the winter do not belong to the graziers, but are joisted; there is none with longer wool than five inches, but the pasture is equal to the finest of Lincoln. In walking over one of these noble herbages, my conductor made me observe the quantity of clover in it, as a proof of its richness; it was the white Dutch and the common red: it is often thus—the value of a pasture depends more on the *diadelphias* than on the *triandrias* family.

To Lifieux.—This rich vale of the Pay d'Auge, some years ago, was fed almost entirely with cows, but now it is very generally under oxen, which are found to pay better. Whatever cows there are, are milked three times a day in summer.

To Caen.—The valley of Corbon is a part of the Pay d'Auge, and said to be the richest of the whole. In this part, one acre, of 160 perches of 24 feet, or about (not exactly) 2¼ acres English, fattens two oxen. Such rents are known as 200 liv. (31. 17s. per English acre) but they are extraordinary: the proportions

here are rather greater, and more profitable than in the former minute. They buy some beasts before Christmas, which they keep on the pasturage alone, except in deep snows; these are forwarder in spring than such as are bought then, and fatten quicker; they have also a few sheep. There are graziers here that are landlords of 10,000 liv. and even 20,000 liv. a year, yet 100 acres are a large farm.

Bayeux.—The rich herbage about this place are employed in fattening oxen, of the Poitou breed, as before; bought lean, on an average, at 200 liv. and sold fat at 350 liv. Their cows are always milked thrice a day in summer; the best give 12 pots a day, or above 4 gallons, and sell at 7 or 8 louis each.

Isigny to Carentan.—Much salt marsh, and very rich; they fat oxen; but I was surprised to find many dairy cows also on these very rich lands. A cow, they say, sometimes pays 10 louis in a year; giving 8 lb. of butter a week, at 20s. to 30s. a pound at some seasons, but now (August 25) only 10s. which, they say, is ruinously cheap. All are milked thrice a day. Others informed me that a cow gives 10. lb. a week, at the average price of 15s. These cows resemble the Suffolk breed, in size and brindle colour, round carcase, and short leg; and would not be known from them but by the horns, which are of the short Alderney sort. The profit on fattening a cow here they reckon at 72 liv. and an ox of the largest size 300 liv. They have also a common calculation, that dairy cows feed at the expence of 8s. a day, and yield 20s. leaving 12s. profit. It is remarkable, and cannot be too much condemned, that there are no dairies in this country: the milk is set, and the butter made, in any common room of a house or cottage.

Carentan.—Many oxen are bought at Michaelmas, and kept a year. They eat each in the winter 300 bottles of hay, or 50 liv. but leave 150 liv. profit, that is, they rise from 300 liv. to 450 liv. Cows pay, on an average, 100 liv. and are kept each on a vergé of grass, the rent of which is from 30 liv. to 40 liv. As the vergé is 40 perches, of 24 feet, or 23,040 feet, it is equal to 96 English square perches, which space pays 100 liv. or per English acre 7l. 5s. 3d.; but all expences are to be deducted, including what the wintering costs. Here they have milk-rooms. They work oxen all the way from Bayeux, in yokes and bows, like the old English ones, only single instead of double.

Advancing; cows sell so high as 10 and 12 louis. Many are milked only twice a day; good ones give 1½ or 1½ lb. of butter a day. They remark, that cows that give the largest quantity of milk do not yield the largest quantity of butter. Fat cows give much richer milk than others.

Again; a good cow gives 6 pots of milk a day, which pays in butter 24s. Three thousand livres profit has been made by fattening thirty cows. A great number of young cattle all over the country, especially year olds.

BRETAGNE.

BRETAGNE.—*Rennes*.—Good oxen of Poitou, 400 liv. to 600 liv. the pair; they are harnessed by the horns. A good cow, 100 liv. Milk but twice a day.

Landerwifer.—I was at the fair here, at which were many cows; in general of the Norman breed, but small: one of the size of a middling Alderney, 4 louis, but said to be dear at present. Colour, black and white, and red and white.

Quimper.—Many black and white small, but well made, cows on the wastes here; a breed somewhat distinct from the Norman; different horns, &c.

Nantes.—Many Poitou oxen; cream coloured; black eyes, tips of horns, and end of tail; about 50 or 60 stone fat; all yoked by the horns.

Nonant.—Much rich herbage; an acre of which feeds two oxen, to the improvement of 160 liv. Many cows are fattened also; and some milked always three times a day in summer.

To Gacé.—Some very fine cream coloured oxen, of 60 stone or more; but, in general, red and white, not Poitou.

ISLE OF FRANCE.—*Nangis*.—Cows sell at 4 louis or 5 louis; oxen, half fat, from 8 louis to 11 louis. They come from Franche Compté.

CHAMPAGNE.—*Mareuil*.—Mons. Le Blanc's Swiss cows give 18 pints, of Paris (the Paris pint is an English quart) of milk per diem, and hold their milk remarkably long. He gave 40 louis for a bull and a cow.

LORRAINE.—*Braban*.—A small cow, 75 liv.

ALSACE.—*Straßbourg*.—A cow, 6 louis; an ox the same.

Iffenheim.—Cows improve as you approach Franche Compté.

Befort.—Good oxen, red and cream coloured, to 25 louis a pair.

Isle.—Here much smaller; and they say the fine ones I have seen are from the mountains on the frontiers of Swisserland.

BOURGOGNE.—*Dijon to Nuys*.—Small oxen in this country, and yoked by the horns.

Autun to La Maison de Bourgogne.—Good oxen drawing by the horns.

AUVERGNE.—*Clermont*.—Salt given twice a day to cows that give milk. In the mountains the price of cows, 150 liv. to 200 liv.; a few, 300 liv.: an ox, from 200 liv. to 450 liv.

Izoir.—A pair of good oxen, 16 louis to 18 louis, which will draw 2000lb. The Poitevins will buy only red cattle in Auvergne, having remarked that they fatten easier.*

VIVARAIS.—*Costerons*.—A small cow, 4 louis.

PROVENCE.—The cities of Aix, Marseilles, and Toulon, are fed by oxen, cows, and sheep, from Auvergne, which come every week; and a few from Piedmont.

* See also *Voyage D'Auvergne, par Mons. Le Grand D'Aussy*. 8vo. 1788. P. 273.

Tour d'Aigues.—A pair of good oxen, 18 louis or 20 louis. When they have done working, they are fattened with the flour of the *lathyrus sativus*, &c. made into paste, and balls given fresh every night and morning; each ox, two or three balls, as large as a man's fist, with hay.

Observations.

FROM the preceding notes it appears, that in Normandy, the Bas Poitou, Limousin, Quercy, and Guienne, the importance of cattle is pretty well understood; in some districts very well; and that in the pasturage part of Normandy, the quantity is well proportioned to the richness of the country. In all the rest of the kingdom, which forms much the greater part of it, there is nothing that attracts notice. There would, in eighteen-twentieths of it, be scarcely any cattle at all, were it not for the practice of ploughing with them. There are some practices noted, which merit the attention even of English farmers.—1. The Limousin and Quercy methods of fattening, by means of acid food.—It is remarkable, that I have found hogs to fatten much better with their food become acid, than when used fresh.* But in England no experiments, to my knowledge, have been made, on applying the same principle to oxen; it is, however, done in the Limousin with great success. The subject is very curious, but the brevity necessary to a traveller will not allow my pursuing it at present.—2. The practice in Flanders, and, in some degree, in Quercy, &c. of keeping cows, oxen, and all sorts of cattle, confined in stables the whole year through.—This I take to be one of the most correct and probably one of the most profitable methods that can be pursued; since, by means of it, there is a constant accumulation of dung throughout the year, and the food is made to go much farther.—3. Milking well fed cows thrice a day, as in Normandy.—Experiments should be made on the advantages of this practice, which will probably be found not inconsiderable; it is never done, either in England nor in Lombardy.

Except in the provinces I have named, the management of cattle in France is a blank. On an average of the kingdom, there is not, perhaps, a tenth of what there ought to be: and of this any one must be convinced, who reflects, that the courses of crops throughout the kingdom are calculated for corn only; generally bread corn; and that no attention whatever is paid to the equally important object of supporting great herds of cattle, for raising manure, by introducing the culture of plants that make cattle the preparative for corn, instead of those barren fallows which are a disgrace to the kingdom. This system of interweaving the crops which support the cattle, among those of corn, is the

* *Annals of Agriculture*, vol. i. p. 340.

pillar of English husbandry; without which our agriculture would be as miserable and as unproductive as that of France. The importance of grafs in such views, is little understood in France; but in proportion as corn is the ultimate object, should be the attention that is paid to grafs. England, by the immense extent of her pastures, has a prodigious preparation always ready for corn, if it was demanded. He who has grafs can, at any time, have corn; but he who has corn, cannot at any time have grafs, which demands one or two years accurate preparation. In proportion to your grafs, is the quantity and mass of your improvements; for few soils, not laid to grafs, are at their last stage of improvement. The contrary of all this takes place in France; and there is little appearance, from the complexion of those ideas which are at present fashionable there, that the kingdom will be materially improved in this respect: the prejudices in favour of small farms, and a minute division of property, and the attention paid to the pernicious rights of commonage, are mortal to such an improvement; which never can be effected but by means of large farms, and an unlimited power of enclosure.

Horses.

THIS is an animal about which I have never been solicitous, nor ever paid much attention; I was very early and practically convinced of the superiority of oxen for most of the works of husbandry; I may, indeed, say for all, except quick harrowing: and if oxen trot six miles an hour with coaches, in Bengal, which is the fact, they are certainly applicable to the harrow, with proper training. To introduce the use of oxen in any country, is so important an agricultural and political object, that the horse would be considered merely as administering to luxury and war. The very few minutes I took, I shall insert in the order they occurred.

LIMOUSIN.—This province is reckoned to breed the best light horses that are in the kingdom; and some capital regiments of light horse are always mounted from hence; they are noted for their motion and hardiness. Some miles to the right of St. George, is Pompadour, a royal demesne, where the King has a *baras* (stud): there are all kinds of horses, but chiefly Arabian, Turkish, and English. Three years ago four Arabians were imported, which had been procured at the expence of 72,000 liv. (3149l.); and, owing to these exertions, the breed of this province, which was almost spoiled, has been much recovered. For covering a mare, no more is paid than 3 liv. which is for the groom, and a feed of oats for the horse. They are free to sell their colts to whom they please; but if they come up to the King's standard of height, his officers have the preference, on paying the same price offered by others; which, however,

however, the owner may refuse, if he pleases. These horses are never saddled till six years old, and never eat corn till they are five; the reason given is, that they may not hurt their eyes. They pasture all day, but not at night, on account of the wolves, which abound so in this country as to be a nuisance. Prices are very high; a horse of six years old, a little more than 4 feet 6 inches high, sells for 70 louis; and 15 louis have been offered for a colt at one year old. The pastures are good, and proper for breeding horses.

Cabors.—Bean-straw they reckon excellent for horses, but not that of pease, which is too heating.

Agen.—Meet women going to this market, loaded with couch roots to sell for feeding horses. The same practice obtains at Naples.

SAINTONGE.—*Monlieu*.—Never give chaff to their horses, as they think it very bad for them.

ISLE OF FRANCE.—*Dugny*.—Mons. Cretté de Palleuel has found cut chaff one of the most æconomical foods that can be given to horses; and his machine for cutting it is by far the most powerful one that I have any where seen. It is a mill turned by a horse; the cutting instruments are two small cylinders, that revolve against each other, circular cutting hoops being on their surface, that lock into each other; those of one, plain, but of the other, toothed: just above them is a large trough or tray, to hold a truss of straw, which weighs 12 lb. and the machine cuts it into chaff in three minutes, without putting the horse out of his pace; and in two minutes, by driving him quicker; a man attends to spread the straw equally in the tray, as it is sucked in by the revolving cylinders; a boy driving the horse. One of the machines common in England, for dressing corn, is at the same time turned: the whole is in a building of eight yards square.

NORMANDIE.—*Isigny*.—The rich herbage here are fed, not only with bullocks and cows, but also with mares and foals.

Carentan.—Colts, bred here, sell for very high prices, even to 100 louis, at three years old; but in general good ones from 25 to 30 louis.

BRETAGNE.—*Rennes*.—Good horses sell at 150 liv. The author of the *Considerations sur le Commerce de Bretagne*, says, p. 87. that he has seen many markets in the bishopricks of Rennes and Nantes, where the best horse was not worth 60 liv.

Morlaix.—See in this vicinity, for several miles, some fine bay mares with foals.

Auvergnac.—Informed that Bretagne exports 24,000 horses, from 12 to 25 louis each; and the country that chiefly produces them, is from Lamballe to the sea beyond Brest.

ALSACE.—*Strasbourg*.—A good farm horse, 12 louis.

To Schelestadt.—Clover mown for soiling all the way.

The Norman horses for draught, and the Limousin for the saddle, are esteemed the best in the kingdom. Great imports have been made of English horses for the coach and saddle. It is no object to lessen that import, for their own lands can be applied to much more profitable uses than breeding of horses. The *œconomistes* were great enemies to the use of oxen, and warm advocates for that of horses becoming general; one of the many gross errors which that fanciful sect were guilty of.

Hogs.

GASCOIGN.—*St. Palais to Anspan.*—See many fine white, and black and white hogs; they are fed much on acorns, but are fattened throughout this country on maize ground to flour, and boiled with water to a paste, and given fresh, milk-warm, every day. Some on beans. They are turned a year old when put up to fatten; rise to the weight of two or three quintals. These are the hogs that furnish Bayonne with the hams and bacon, which are so famous all over Europe. The hams sell at 20s. the pound.

I have reserved this minute, from some others of little consequence, for the opportunity of remarking, that, in England, the old custom of feeding hogs with warm food, is totally discontinued; but it well deserves experiment, whether it would not answer in fattening, and also in the nourishment of sows and pigs. Such experiments are difficult to make satisfactorily, but yet they ought to be made by some persons that are able. Warm food in winter, regularly given, I should suppose, must be more fattening than that which is cold, and, in bad weather, half frozen.

CHAP. XIII.

Of the Culture of various Plants in France.

IN the course of my inquiries into the French agriculture, I made some minutes on various articles, that do not merit a separate chapter assigned to each; I shall therefore introduce them to the reader alphabetically. It may be of use to future travellers to know what articles are cultivated in that kingdom, that they may give to each such an attention as may suit their purpose.

Almonds.

PROVENCE—Aix.—More subject to accidents than olives: sometimes three, four, and five bad crops to one good. Olives flower in June, but almonds in February, and consequently subject to frosts. The produce of a good tree is commonly 3 liv.

Tour d'Aigues.—Do not yield a good crop oftener than once in ten years. Price, 36 to 40 liv. the quintal: four and a half quintals in the shell yield one clean: the price has been 70 liv. Price of the pistachio almond, 6 liv. the 15 lb. in the shell. Some few fine almond trees will give a quintal in the shell. They are a most hazardous culture, by reason of the fog that makes them drop; the worm that eats; and the frost that nips.

Beans.

SOISSONNOIS.—Coucy.—In the rich lands cultivated, in the course of, 1, beans; 2, wheat, remark now (October 31) some beautiful curled and luxuriant pieces of wheat, which, from the beans among it, appear to have been sown after this crop.

ARTOIS.—Lillers to Bethune.—Many beans through all Artois, in drills at 12 or 14 inches, very fine and very clean; the culture is as common and as good as in Kent, and they have a much richer soil. Wheat is sown after mustard, flax, and beans; and is better after beans than after either of the other two crops.

ALSACE.—Wiltenheim to Strasbourg.—Many pieces; good and very clean. Produce, six sacks (of 180 lb. of wheat) per arpent of 24,000 feet (28 bushels per English acre).

Schelestadt.—Produce, six to eight sacks, at 7 to 12 liv. (7 at 9 liv. is 4l. 7s. per English acre).

The

The culture of beans is by no means so common in France as it ought to be; they are a very necessary assistance on deep rich soils in the great work of banishing fallows; they prepare on such soils better than any other crop for wheat, and are of capital use in supporting and fattening cattle and hogs.

Broom.

BRETAGNE.—*Rennes*.—The land left to it in the common course of crops. It is cut for faggots; sold to the bakers, &c.

Morlaix.—Cultivated through all this country, in a very extraordinary system; it is introduced in a regular course of crops, and left three or four years on the land; at which growth cut for faggots, and forms the principal fuel of the country. It is a vast growth, much superior to any thing I ever saw; six or seven feet high, and very stout; on regular lands, with intervals of two or three feet. Price sometimes of a cord of wood, 30 liv. Does this apologize for such a system?

Brest.—The broom seed is sown among oats, as clover is in other places, and left four years, during all which time it is fed. The faggots of a good journal will sell for 400 liv. (14l. per English acre). The faggots weigh 15lb. and sell fifty for 9 liv. to 12 liv. being a three-horse load. It is only within the reach of Brest market that it is worth 400 liv.—elsewhere only 300 liv. the best. Four years broom improves land so much, that they can take three crops of corn after it.

BOURGOGNE.—*Luzy*.—When I left Bretagne, I never expected again to find broom an article of culture; but the rye-lands of all this country, and there is nothing but rye in it, are left, when exhausted by corn, to cover themselves with broom, during five years; and they consider it as the principal support of their cattle.

To Bourbonlancy and Bourbonnois.—*Moulins*.—Much broom through all this district of rye-land.

Carrots and Parsnips.

FLANDERS.—*Cambray*.—See some fine carrots taken up, which, on inquiry, I find are for cows. They sow 4 lb. of seed per arpent; hoe them thrice: I guessed the crop about four bushels per square rod. An arpent sells, for cattle, at 180 liv. the purchaser taking up (5l. 5s. per English acre). After them they dung lightly, and sow wheat.

Orchies to Lille.—The culture here is singular; they sow the seed at the same time, and on the same land, as flax, about Easter; that crop is pulled in July, the carrots then grow well, and the produce more profitable than any other

application of the flax stubble. They yield, I guess, from 60 to 80 bushels, and some more, per English acre; but what I saw were much too thick.

Argentan to Bailleul.—Carrots taken up, and guarded, by building in the neatest and most effectual way, against the frost; they are topped, laid in round heaps, and packed close, with their heads outwards; and being covered with straw, in the form of a pyramid, a trench is digged around, and the earth piled neatly over the straw, to keep out the frost. In this manner they are found perfectly secure.

ARTOIS.—*Afs to Aras.*—A sprinkling of carrots, but none good.

BRETAGNE.—*Ponton to Morlaix.*—Many parsnips cultivated about a league to the left; they are sown alone and hoed. They are given to horses, and are reckoned so valuable, that a journal is worth more than one of wheat. Nearer to Morlaix, the road passes a few small pieces. They are on beds, 5 or 6 yards broad, with trenches digged between, and on the edges of those trenches a row of cabbages.

Morlaix.—About this place, and in general through the bishoprick of St. Pol de Leon, the culture of parsnips is of very great consequence to the people. Almost half the country subsists on them in winter, boiled in soup, &c. and their horses are generally fed with them. A horse load, of about 300 lb. sells commonly at 3 liv.; in scarce years, at 4 liv.; and such a load is good food for a horse fifteen days. At 60 lb. to the bushel, this is 5 bushels, and 2s. 7½d. for that, is 6½d. per bushel of that weight. I made many inquiries how many loads on a journal, but no such thing as information tolerably to be depended on; I must therefore guess the present crop, by the examination I made of many, to amount to about 300 bushels, or 350 per English acre. The common assertion, therefore, that a journal of parsnips is worth two of wheat, seems to be well founded. The ground is all digged a full spit deep for them; they are kept clean by hand-weeding very accurately, but are left, for want of hoeing, beyond all comparison, too thick. They are reckoned the best of all foods for a horse, and much exceeding oats; bullocks fatten quicker and better on them than on any other food; in short, they are, for all sorts of stock, the most valuable produce found on a farm. The soil is a rich deep friable sandy loam.

Landernau to Brest.—The culture of parsnips here declines much, but I saw a few pieces; one was weeding by five men, crawling on their knees. Fatten many horses, by feeding them with cabbages and parsnips boiled together, and mixed with buckwheat-flour, and given warm. They have a great pride here in having fat horses. Many other districts in France, besides Bretagne, possess the right soil for parsnips; and many more, besides Flanders, that for carrots; but they are no where else articles of common culture. Parsnips are not cultivated in England; but carrots are in Suffolk, with great success, and all the horses

horses in the maritime corner of that county fed with them. I have, in the *Annals of Agriculture*, given many details of their culture and uses. Carrots succeed well on all dry soils that are six inches deep; but, for large crops, the land should be a foot deep, rich and dry. The extent of such in France is very great, but this general profitable use not made of them.

Cabbages.

FLANDERS.—*Orchies to Lille*.—The kale, called here *choux de Vache*, is common through this country; it never cabbages, but yields a large produce of loose reddish leaves, which the farmers give to their cows. The seed is sown in April, and they are transplanted in June or July, on to well-dunged land, in rows, generally two feet by one foot: I saw some fields of them, in which they were planted at greater distances. They are kept clean, by hoeing. They are reckoned excellent food for cows; and the butter made from them is good, but not equal to that from carrots.

NORMANDIE.—*Granville to Avranches*.—In the gardens of the cottages, many cabbage trees five and six feet high.

BRETAGNE.—*St. Brieux*.—Many sown here on good land, on wheat stubbles, for selling plants to all the gardens of the country, and to a distance. I do not see more than to the amount of a journal in one piece; which, in September, I must have done, had they possessed any cabbage culture, as represented to me, worth attention. They first clean, and then plough the wheat stubbles, and chop and break the surface of the three-foot ridges fine, and then sow. The plants are now (September 7) about an inch high, and some only coming up.

Morlaix.—They have some crops that are much more productive than their turnips, but planted greatly too thick: they are given to cows and oxen.

ANJOU.—*Migniame*.—The *chou d'Anjou*, of which the Marquis de Turbilly speaks, is not to be found at present in this country; they prefer the *chou de Poitou*, which is a sort of kale, and produces larger crops of leaves than the *chou d'Anjou*. Mons. Livonnier gave me some seeds, but, by mistake, they proved a bad sort of *rave*, and not comparable to our turnips, as I found, by sowing them at Bradfield.

ALSACE.—*Saverne to Wiltenheim*.—Many cabbages, but full of weeds.

Straßbourg.—Crops to a great weight, but only for four-cROUT.

Schelestat.—The quantity increases between Benfeldt and Schelestat. Their culture is, to sow the seed on a bed in March, covered with mats, like tobacco, and transplant in June, 2000 to 3000 plants on an arpent; they make a hole with a spade, which they fill with water, and then plant: they never horse-hoe, yet the distance would admit it well. They are in size 10 lb. or 12 lb. and some

20 lb.; the hearts are for four-croust, but the leaves for cows. An arpent is worth 303 liv. (20l. 15s. 10d. per English acre); but carriage to a town is to be deducted.

The culture of cabbages, for cattle, is one of the most important objects in English agriculture; without which, large stocks of cattle or sheep are not to be kept on soils improper for turnips. They are, in every respect but one, preferable to that root; the only inferiority is, that of cabbages demanding dung on all soils, whereas good land will yield turnips without manuring. Great attention ought to be paid to the full introduction of these two crops, without which we may venture to predict, that the agriculture of France will continue poor and unproductive, for want of its due stock of cattle and sheep.

Clover.

ISLE OF FRANCE.—*Liancourt*.—Never cultivate it for its place in a rotation, but merely for forage, like lucerne; have a barbarous custom of sowing it without tillage on wheat stubbles, and it lasts so sometimes two years.

ARTOIS.—*Recouffe*.—Mons. Drinkbierre, a very intelligent farmer here, assured me, that clover exhausted and spoiled the land, and that wheat after it was never so good as after a fallow; but as the clover is sown with a second, and even a third corn crop, no wonder therefore that it fouls land.

I could add many other notes on this subject, but will be content to mention, in general, that the introduction of clover, wherever I have met with it, has been commonly effected in such a manner that very little benefit is to be expected from it. All good farmers in England know, from long experience, that the common red clover is no friend to clean farming, if sown with a second or third crop of corn. In the course, 1, turnips or cabbages; 2, barley or oats; 3, clover; 4, wheat: the land is kept in garden order. But if after that fourth crop, the farmer goes on and sows, 5, barley or oats; 6, clover; 7, wheat, the land will be both foul and exhausted. In a word, clover is beneficial to the really good and clean farmer only to the extent of his turnips, cabbages, and fallow; and never ought to be sown but on land previously cleaned by those hoeing crops, or by fallow. As to fallow, no Frenchman ever makes it but for wheat, consequently the culture of clover is excluded. I have often seen it sown in this course; 1, fallow; 2, wheat; 3, barley; 4, oats; 5, clover; 6, clover; 7, wheat; 8, oats; and the land inevitably full of weeds. I may venture to assert, that clover thus introduced, or even in courses less reprehensible, but not correct, will do more mischief than good, and that a country is better cultivated without than with it. Hence, therefore, let the men, emulous of the character of good farmers, consider it as essential to good husbandry to have no more
clover

clover than they have turnips and cabbages, or some other crop that answers the same end; and never to sow it but with the first crop of corn; by these means their land will be clean, and they will reap the benefits of the culture without the common evils.

I have read in some authors, an account of great German farmers having such immense quantities of clover, as are sufficient to prove the utter impossibility of a due preparation: these quantities are made a matter of boast. We know, however, in England, in what manner to appreciate such extents of clover.

Chestnuts.

BERRY.—*La Marche*.—First meet with them on entering *La Marche*.

Boismandè.—They are spread over all the country; the fruit are sold, according to the year, from 5*s.* to 10*s.* and 15*s.* the boiseau, which measure will feed a man three days: they rub off the skin; boil them in water with some salt; squeeze them into a kind of paste, which they dry by the fire; they commend this food as pleasant and wholesome. The small ones are given to pigs, but will not fatten them so well as acorns, the bacon being soft; when fattened with acorns, they are finished with a little corn. A chestnut tree gives two boiseau each of fruit on an average; a good one, five or six. The timber is excellent for building; I measured the area spread by many of them, and found it 25 feet every way. Each tree, therefore, occupies 625 feet, and an acre fully planted would contain 70; at two boiseau each it is 140, which, at 10*s.* is 2*l.* 18*s.* 4*d.* and as one of these measures will feed a man three days, an acre would support a man four hundred and twenty days, or fourteen months. It must, however, be obvious, that land cannot be so exactly filled, and that an acre of land would not probably, in common, do for half that number.

La Villeaubrun.—They eat many chestnuts, but do not live upon them, eating some bread also; in which mode of consuming a boiseau, it will last a man five or six days. Price as above.

LIMOUSIN.—*Limoges*.—Price 7*s.* to 15*s.* the boiseau. This food, though general in the country, would not be sufficient alone; the poor eat therefore some rye-bread. The comfort of them to families is very great, for there is no limit in the consumption, as of every thing else: the children eat them all day long; and in seasons when there are no chestnuts there is often great distress among the poor—The exact transcript of potatoes in Ireland. The method of cooking chestnuts here, is to take off the outward skin, and to put a large quantity into a boiler, with a handful of salt, and very little water, to yield steam; they cover it as closely as possible, to keep in the steam: if much water is added, they
lose

lose their flavour and nourishing quality. An arpent under chefnuts does not yield a product equal to a good arpent of corn, but more than a bad one.

To Magnac.—They are spread over all the arable fields.

QUERCY.—*Brive to Noailles.*—Ditto; but after Noailles there are no more.

Payrac.—Boil them for their food, as above described.

LANGUEDOC.—*Gange.*—Many in the mountains; and exceedingly fine chefnut underwood.

POITOU.—*Ruffec.*—Yields a good crop, to the amount even of 10 liv. for a good tree's produce. The poor people live on them. A measure of 45lb. has been sold this year at 48s.

BRETAGNE.—*Pont Orson.*—On entering this province, these trees immediately occur, for there are none on the Normandy side of the river, that parts the two provinces.

MAINE.—*La Fleche to Le Mans.*—Many chefnuts, the produce chiefly sold to towns; the poor people here not living on them with any regularity: three bushels (each holding 30 lb of wheat) are a good crop for one tree, and sell at 40s. the bushel; this is more than a mean produce, but not an extraordinary one. The number here is very great; and trees, but of a few years growth, are well loaded.

VIVARAIS.—*Pradelles to Thuytz.*—Immense quantities of these trees on the mountains; it is the greatest chefnut region I have seen in France. The poor people live on them boiled; and they sell, by measure, at the price of rye.

The husbandry of spreading chefnuts over arable lands must unquestionably be very bad; the corn must suffer greatly, and the plough be much impeded. It is as easy to have these trees upon grass land, where they would be comparatively harmless: but the fact is here, as is so general in France, that they have no pastures which the plough does not occupy by turns; all, except rich meadows, being arable. The fruit is so great a resource for the poor, that planting these trees upon lands not capable of tillage by the plough, is a very considerable improvement: the mountains of the Vivarais thus are made productive in the best method perhaps that they admit.

Chicory.

ISLE OF FRANCE.—*Dugny.*—Mons. Cretté de Paleuel, 1787, had this plant recommended to him by the Royal Society of Paris; in consequence of which, he has made several very successful experiments on it. He has had it two years under cultivation. The seed is sown in March, 12 lb. per arpent (100 perches at 18 feet) on one ploughing, and is harrowed in. It rises so thick, as to cover the whole ground, and is mown the same year once; Mons. Cretté has cut one piece

piece twice the first year. The following winter he dunged it, at the rate of eight loads, of three horses, per arpent. The year after, some was cut three times, and some four; and Monf. Cretté remarks, that the oftener the better, because more herbaceous and the stalks not so hard. He weighed the crop upon one piece, and found the weight, green,

	lb.
Of the first cutting, - - - - -	55,000
second, - - - - -	18,000
third, - - - - -	3,000
	<hr/>
Per arpent, - - - - -	76,000
	<hr/>

By making some of it into hay, he found that it lost three-fourths of its weight in drying, consequently the arpent gave 19,000 lb. of hay, or 10 tons per English acre. It is so succulent and herbaceous a plant, as to dry with difficulty, if the weather be not very fine; but the hay, he thinks, is equal to that of clover, though inferior to meadow hay. He has used much in foiling, and with great success, for horses, cows, young cattle, and calves; finds it to be eaten greedily by all, and to give very good cream and butter. Monf. Cretté's fine dairy of cows being in their stalls, he ordered them to be fed with it in my presence; and they ate all that was given, with great avidity. When in hay, it is most preferred by sheep; cows do not, in that state, eat the stalks so well as sheep. A circumstance which he considers as valuable, is its not being hurt by drought so much as most other plants; and he informs me, but not on his own experience, that it will last good ten years.

I viewed one of his crops, of seven or eight arpents, sown last spring, and which has been mown once; I found it truly beautiful. He sowed common clover and sainfoin among it, and altogether it afforded a very fine fleece of herbage, about eight or nine inches high (October 28) which he intends feeding this autumn with his sheep. He is of opinion that the sainfoin will be quite suffocated, and that the chicory will get the better of the clover.

PROVENCE.—*Vaucluse to Orgon*.—In a very fine watered meadow, one-third of the herbage is this plant.

I liked the appearance of this plant so well in France, and was so perfectly satisfied with what I saw of it, cultivated by Monf. Cretté de Paleuel, and growing spontaneously in the meadows, that I brought seed of it to England; and have cultivated it largely at Bradfield, with such success, that I think it one of the best presents France ever made to this kingdom. I sowed it with corn like clover; but it pays well for occupying the land entirely. It will prove, without doubt, a very valuable plant for laying land permanently to grass; and also for introducing, in courses of crops, when the land wants rest for three, four, or five

five years. I am much mistaken if we do not in a few years make a much greater progress in the culture of this plant than the French themselves, from whom we borrowed it, will do.

Sheep are said to be very fond of it*, a fact I have sufficiently proved in Suffolk. From a passage in an Italian author, who speaks of sowing the wild chicory, I am in doubt whether the French have the honour of being really the first introducers of this plant†.

Coleseed.

FLANDERS.—*Cambray*.—Near this town, I met first with the culture of coleseed: they call it *gozá*. Sow the seed thick on a seed-bed, for transplanting; setting it out on an oat stubble, after one ploughing. This is so great and striking an improvement of our culture of the same plant, that it merits the utmost attention; for saving a whole year is an object of the first consequence. The transplanting is not performed till October, and lasts all November, if no frost; and at such a season there is no danger of the plants not succeeding: earlier would however surely be better, to enable them to be stronger rooted, to withstand the spring frosts, which often destroy them; but the object is not to give their attention to this business till every thing that concerns wheat sowing is over. The plants are large, and two feet long; a man makes the holes with a large dibble, like the potatoe one used on the Essex side of London, and men and women fix the plants, at 18 inches by 10 inches; some at a foot square, for which they are paid 9 liv. per manco of land. The culture is so common all the way to Valenciennes, that there are pieces of two, three, and four acres of seed-bed, now cleared, or clearing, for planting. The crop is reckoned very uncertain; sometimes it pays nothing, but in a good year up to 300 liv. the arpent (100 perches of 24 feet) or 8l. 15s. the English acre. They make the crop in July, and, by manuring the land, get good wheat.

Valenciennes to Orchies.—This is a more valuable crop than wheat, if it succeeds; but it is very uncertain. All transplanted.

Lille.—The number of mills, near Lille, for beating coleseed, is surprising, and proves the immense quantity of this plant that is cultivated in the neighbourhood. I counted sixty at no great distance from each other.

Bailleul.—The quantity cultivated through this country immense; all transplanted; it occurs once in a course of six or seven years. Price of the cakes, 3½s. each; they are the same size as ours in England.

* *Phytographie Oeconomique de la Lorraine*, Par M. Willemet. 1780. 8vo. P. 57.

† *Ronconi Dizionario D'Agricoltura o sia La Coltivazione Italiana*. Tom. ii. P. 148.

ARTOIS.—*St. Omers*.—Great stacks of coleseed straw all over the country (August 7th) bound in bundles, and therefore applied to use.

I should remark, in general, that I never met with coleseed cultivated in any part of the kingdom merely for sheep-feed; yet it is an object, so applied, of great consequence, and would be particularly useful in France, where the operose cultures of turnips and cabbages will be long establishing themselves. With this view coleseed should be thus introduced:

1. Winter tares, sown the beginning of September on a wheat stubble; mown for soiling: then the land ploughed and coleseed harrowed in.
2. Barley, or oats.
3. Clover.
4. Wheat.

Fuller's Thistle.

ISLE OF FRANCE.—*Liancourt*.—Very profitable: has been known to amount to 300 liv. or 400 liv. the arpent (about 1½ acre).

Furz.

GASCOIGN.—*St. Palais to Anspan*.—A practice in these mountainous wastes, which deserves attention, is their cutting furz when in blossom, and chopping them mixed with straw for horses, &c.; and they find that no food is more hearty or nourishing.

NORMANDIE.—*Vologne to Cherbourg*.—Throughout this country a scattering of furz sown as a crop, with wheat or barley, as clover is usually sown: the third year they cut it to bruise for horses; and every year afterwards: and it yields thus a produce of 40 liv. the vergé, of 96 English perch.

BRETAGNE.—*St. Pol Leon*.—Through all this bishopric the horses are fed with it bruised, and it is well known to be a most nourishing food.

The practice here minutely is not absolutely unknown in England; there are many traces of it in Wales, and some other parts of the kingdom. I have been assured that an acre, well and evenly seeded, and mown for horses every year, has yielded an annual produce, worth, on a moderate estimate, 10l. but I never tried it, which was a great neglect, in Hertfordshire, for I had there land that was proper for it.

Culture of Hemp and Flax.

PICARDIE.—*Montreuil to Picquigny*.—Small patches of flax all the way. At Picquigny, a good deal of land ploughing for hemp, to be sown in a week (May 22).

QUERCY.—The hemp, in much of this province, is sown every year on the same spots; and very often highly manured. This appears to be an erroneous system, wherever the lands in general are good enough to yield it.

Caussade.—Vast quantities near this place, now (June 12,) two or three feet high.

LANGUEDOC.—*Monrejeau*.—Flax now (August 10) grassing.

Bagnere de Bigore to Lour.—Never water their flax, only grafs it. I saw much with the grafs grown through it; if the land or weather be tolerably wet, three weeks are sufficient.

GUIENNE.—*Port de Leyrac*.—This noble vale of the Garonne, which is one of the richest districts of France, is also one of the most productive in hemp that is to be found in the kingdom.

Agen.—Hemp yields 10 quintals per carterée, at 40 liv. the quintal, *poid de table* (17l. 10s.), which carterée is sown with 217 lb. of wheat. This is probably about 1½ English acre.

Aguillon.—The hemp is every where watering in the Garonne: they do not leave it in more than three or four days.

Tonneins.—The whole country, from Aguillon to this place, is all under either hemp or wheat, with exception of some maiz; and its numerous population seems now employed on hemp.

La Morte Landron.—It yields 10 to 12 quintals, at 36 liv. to 45 liv. the quintal.

SOISSONNOIS.—*Coucy*.—Hemp cultivated in the rich vales, in the course,—1, hemp; 2, wheat. It yields 500 bottes, at 25 liv. the hundred, reckoned on the foot before watering.

St. Amand.—The carterée of land, of 100 verge of 19 feet (36,100 feet), under flax, has this year a very good crop, on account of the rainy weather; it has been sold at 1200 liv. or very near the fee simple of the land (55l. 11s. 3d. per English acre). This amazing value of flax made me desirous of knowing if it depended on soil, or on management. Sir Richard Weston, in the last century, who has been copied by many scores of writers since, speaks of poor sandy land as being the best for that flax of which the fine Bruffels lace is made; consequently this is made from land abundantly different from what produces the Valenciennes laces, if that assertion were ever true. The soil at St. Amand is a

deep

a deep moist friable loamy clay, of vast fertility, and situated in a district where the greatest possible use is made of manures; it therefore abounds very much with vegetable mould. Flax is sown on the same land, once in twelve to fifteen years; but in Austrian Flanders, once in seven or eight years. Advancing, and repeating my inquiries, I was assured that flax had been raised to the amount of 2000 liv. the carterée (92l. 15s. 6d. per English acre). The land is nearly the same as above described, and lets, when rented, at 36 liv. the carterée (11. 13s. 3d. per English acre). They sow 2 *raziers* of seed, each holding 50 lb. of wheat per carterée; and a middling crop of good flax is from 3½ to 4 feet high, and extremely thick. They water it in ditches, ten, twelve, and fourteen days, according to the season; the hotter the weather, the sooner it is in a proper state of putrefaction. After watering, they always grafs it in the common method.

Going on, and gleaning fresh information, I learned that 1200 liv. may be esteemed a great produce per carterée; the land all round, good and bad, of a whole farm letting at 30 liv. and selling at 1200 liv. Nothing can shew more attention than their cultivation: besides weeding it with the greatest care, while young, they place poles, or forked stakes, amongst it, when at a proper height, in order to prevent its being beaten to the ground by rain, from its own length and weight; without this precaution it would be flat down, even to rotting.

Orchies.—A carterée of flax, of 40,000 feet, rises to the value of 1500 liv. and even more (63l. 18s. 9d. per English acre). They sow such as is intended for fine thread, as soon as the frosts are over, which is in March; but such as is for coarser works, so late as May. Never seed their own flax, always using that of Riga. They prefer for it, an oat-stubble that followed clover; and they manure for it in the winter preceding the sowing. Wheat is, in general, better after flax than after hemp.

Lille.—Flax, in common, is worth 90 liv. the *centier*, or 360 liv. the carterée (15l. 6s. 3d. per English acre): this is excluding uncommon crops.

ARTOIS.—*Lillers*.—Flax all through the country, and exceedingly fine. Sow wheat after it.

Bethune.—An arpent of good flax worth more than one of wheat; yet good wheat is worth 200 liv.

Beauval.—Flax sometimes worth 500 liv. the journal (25l. 17s. 11d. per English acre). Hemp does not equal it. They do not water flax here, only spread it on grafs or stubbles.

NORMANDIE.—*Bolbec to Harfleur*.—Flax not watered, but spread on stubble.

BRETAGNE.—Throughout this province, they every where cultivate flax, in patches, by every family, for domestic employment.

Ancenis.—The culture of flax is generally, throughout the kingdom, as well as in the greatest part of Europe, that of a spring crop; but here it is sown in autumn. They are now working the wheat-stubbles on one ploughing, very fine, with a stout bident-hoe, and sowing them: some is up. It is pulled in August, and wheat sown after it.

ANJOU.—*Migniame*.—They have winter-sown flax all over the country. The value of the crop exceeds that of wheat. They do not water, only grafs it; yet admit that watering makes it whiter and finer.

Turbilly.—Hemp is sown in patches every where through the country; sells at 8*s*. the pound, raw; spun, at 26*s*. and 27*s*.; bleached, at 30*s*. to 36*s*. The crop is 30 to 40 weights, each 15 lb. or 16 lb. per journal, or about 210 liv.

MAINE.—*Guesceland*.—Through all this country there is much hemp sown every year, on the same spot; spun; and made, by domestic fabrics, into cloth, for home uses. Spinning is 10*s*. the pound; and it is an uncommon spinner that can do a pound in a day; in common but half a pound.

LORRAINE.—*Luneville*.—Hemp is cultivated every where in the province, on rich spots; hence there is much of it; and some villages have been known to make a thousand crowns in a year of their thread and linen. If it is wished that the hemp be very fine, they do not water, but only spread it on the grafs; but, in general, water it. Use their own seed, and furnish much to their neighbours; but have that of flax from Flanders. Sow beans among flax, for supporting it; others do this with small boughs of trees. Some also sow carrots among their flax; which practice, I suppose, they borrowed from Flanders. Hemp is always dunged, and always sown on the same spots, which sell at the same price as gardens; a common and execrable practice in France. A journal gives, on good land, 95 lb. and 103 lb. of *toup*; price last year, ready for spinning, 16*s*. the lb.; the *toup* 11*s*. now higher: also 2 *razeau* of seed (each 180 lb. of wheat). The journal equals 65 English perches.

ALSACE.—*Straßbourg*.—Produce 3 quintals, at 27 liv. the quintal, the arpent (51. 12*s*. per English acre).

Schelestat.—Produce 2 quintals, ready for spinning, at 36 liv. to 48 liv. the quintal (51. 16*s*. 3*d*. per English acre). Water it for cordage, but not for linen; grafs it only, as whiter.

AUVERGNE.—*Clermont*.—In the mountains; price of hemp, ready to spin, 15*s*. to 18*s*. the lb.; spun, 24*s*. fine, 30*s*.

Izoir.—Produce of hemp, per cartona, 150 lb. rough, at 5*s*. the lb. which is 113 lb. ready for spinning; but bad hemp loses more. The *feterée* is 8 cartoni, of 150 toises, or 43,200 feet. Hemp grounds sell equally with gardens (11*l*. 11*s*. 6*d*. per English acre).

Briude.

Briude.—Hemp yields a quintal, raw, per cartona; female is worth 40 liv. the quintal, male, 30 liv.; also 8 coups of seed, at 6*f.* Average produce 35 liv. or 36 liv. in all.

DAUPHINE.—*Loriol.*—Chinese hemp succeeds well with Mons. Faujas de St. Fond, and perfects its seed, which it rarely does in the King's garden, at Paris. He thinks it an error to sow it, like other hemp, in the spring; for he is of opinion, that it would seed even in England, if sown in autumn. He has found, by experiment, that it is excellent for length and strength, if sown thick enough to prevent its spreading laterally, and to make it rise without branching.

PROVENCE.—*Marseilles.*—Price of hemp: Riga, first quality, 36 liv. the quintal; ditto, second quality, 33 liv. Ancona, first quality, 33 liv.; ditto, second quality, 30 liv. to 31 liv. Piedmont, 3 group, 26 liv.; 4 group, 28 liv.

From these notes it appears, that hemp or flax is cultivated in small quantities, through every part of France: generally for the uses of domestic manufactures among the lower classes. A very interesting political question arises on those diffused fabrics, and on which I shall offer a few observations under the chapter of manufactures.

Madder.

ALSACE.—*Straßbourg Fertenheim.*—Much of this plant is cultivated in various parts of Alsace, where the soil is very deep and rich, especially on that which they call *limoneuse*, from its having been deposited by the river. They dig the land for it three feet deep, and manure highly: the rows are six to nine inches asunder, and they hoe it clean thrice a summer. The produce of an arpent, of 24,000 feet, is 40 quintals green, before drying, and the mean price 6 liv. the quintal (16*l.* 12*s.* 6*d.* per English acre). Such is the account I received at Straßbourg; but I know enough of this plant, by experience, to conclude, that such a produce is absolutely inadequate to the expences of the culture, and therefore the crop is probably larger than here stated; not that the low rate of labour should be forgotten.

DAUPHINE.—*Piere Latte.*—Planted here in beds; but it is very poor, and apparently in a soil not rich enough.

To Orange.—Much ditto; all on flat beds, with trenches between, but weedy and ill cultivated. The price is 27 liv. the quintal, dry. Some just planted, and the trenches very shallow: dig at three years old. Price 24 liv. the quintal, dried in the sun. The roots are small and poor.

Avignon.—Price 24 liv. to 30 liv. but there is no profit if it be under 50 liv. It is three years in the land. Sow wheat after it; but if it were not well dunged the

the crop is poor. A good deal on flat beds, 8 feet wide, with trenches between, two broad and two deep, which are digged gradually for spreading on it.

Lille.—An eymena in three years gives 5 quintals, at 20 liv. to 24 liv. the quintal, but a few years ago was 50 liv. to 70 liv. The expences are very high, 120 liv. At 4l. a cwt. which equals a French quintal, madder paid a proper profit for inducing many English cultivators to enter largely into it; but falling to 40s. and 50s. per cwt. some were ruined, and the rest immediately withdrew from it. But in France we find they carry on the culture; it is however weakly and poorly done; with so little vigour, that common crops, well managed, would pay much better.

Maiz.

The notes I took on the subject of this noble plant were very numerous; but as there is reason to believe that its culture cannot be introduced, with any prospect of advantage, in this island, I shall make but a few general observations on it.

In the paper on the climate of France, I have remarked, that this plant will not succeed, in common cultivation, north of Luneville and Ruffec, in a line drawn diagonally across the kingdom; from which interesting fact, we may conclude, that a considerable degree of heat is necessary to its profitable cultivation, and that all ideas of introducing it into England, except as a matter of curiosity, would be vain. It demands a rich soil or plenty of manure, and thrives best on a friable sandy loam; but it is planted on all sorts of soils, except poor gravels. I have seen it on sands, in Guienne, that were not rich, but none is found on the granite gravels of the Bourbonnois, though that province is situated within the maiz climate. The usual culture is to give two or three ploughings to the land; sometimes one ploughing, and one working with the heavy bident-hoe; and the seed is sown in rows at 2 feet or $2\frac{1}{2}$, by $1\frac{1}{2}$ or 2; sometimes in squares. Some I have seen near Bagnere de Bigore, in rows, at 3 feet, and 18 inches from plant to plant. The quantity of seed in Bearn, is the eighth part, by measure, of the quantity of wheat sown. It is universally kept clean by hoeing, in most districts, with such attention as to form a feature, in their husbandry, of capital merit. In August, they cut off all that part of the stalk and herbage which is above the ear, for feeding oxen, cows, &c. and it is perhaps the richest and most saccharine* provender that the climate of France affords; for wherever maiz is cultivated, no lean oxen are to be seen; all are in high order. The crop of grain is, on an average, double the quantity commonly

* A real sugar has been made from it. *Spec. de la Nature.* Vol. ii. p. 247.

reaped

reaped of wheat; about Navareen, in Bearn, more than that; and there the price (1787) is 54*s.* to 55*s.* the measure, holding 36 lb. to 40 lb. of wheat; but in common years 18*s.* to 20*s.* Whether or not it exhausts the land is a question: I have been assured, in Languedoc, that it does not; but near Lourde, in Guienne, they think it exhausts much. Every where the common management is to manure as highly as possible for it. In North America it is said to exhaust considerably *; Monsr. Parmentier contends for the contrary opinion †: wherever I found it, wheat succeeds it, which ought to imply that it is not an exhausting crop. The people in all the maiz provinces live upon it, and find it by far more nourishing than any bread, that of wheat alone excepted. Near Brive, in Quercy, I was informed that they mix one-third rye, and two-thirds maiz to make bread, and, though yellow and heavy, they say it is very good food. A French writer says, that, in Bresse, maiz cakes cost 9 $\frac{2}{3}$ deniers the pound, but that a man eats double the quantity of what he does of bread made of wheat ‡. A late author contends, that it is to be classed among the most wholesome articles of human food ||.

Every one knows that it is much cultivated in North America; about Albany, in New York, it is said to yield a hundred bushels from two pecks of seed §; and that it shoots again after being killed by the frost, even twice; that it withstands the drought better than wheat (*this is questionable*); does much better on loose than on stiff soils, and not well at all on clay. In South Carolina it produces from 10 to 35 bushels per acre ¶. On the Mississippi two negroes made 50 barrels, each 150 lb.** In Kongo, on the coast of Africa, it is said to yield three crops a year ††. According to another account, great care is taken to water it where the situation will admit ‡‡; this I have seen in the Pyrennees; but most of the maiz in France, even nineteen parts in twenty, are never watered. About Douzenac, in the Limousin, they sow it thick to mow for soiling, and at Port St. Marie, on the Garonne, they do the same, after the harvest of other grain, which is the most profitable, and indeed admirable husbandry. This is the only purpose for which it can be cultivated in northern climates. It might be sown in England the first week in June, and mown the end of August, time enough to catch a late crop of turnips, or as a preparation for wheat.

* *Mitchel's Present State of Great Britain and N. America*, p. 157. † *Memoire sur le Mais* 4to. 1785. P. 10. ‡ *Observations sur l'Agriculture*, par M. Varenne de Fenille, p. 91.

¶ *Instruction sur la Culture & les Usages des Mais*. 8vo. 1786. P. 30. § *Kalm's Travels in North America*. Vol. ii. p. 245. ¶ *Description of South Carolina*. 8vo. 1761. P. 9.

** *Du Pratz History of Louisiana*. Vol. i. p. 306. †† *Modern Univ. Hist.* Vol. xvi. p. 25.

‡‡ *Mem. de l'Acad. des Sciences*. 1749. P. 471.

Mustard.

ISLE OF FRANCE.—*Petiviers*.—At Denainvilliers, near this place, I saw them mowing mustard, in full blossom, to feed cows with.

ARTOIS.—*Lillers*.—Much all the way to Bethune; sow spring corn after it.

Orchards.

NORMANDIE.—*Falaise*.—Many apple and pear trees are scattered over the country. They never plant them on the best lands, as they are convinced that the damage to the corn, &c. is at least equal to the value of the cyder; but on the poorer soils they consider it as an improvement, forming a fourth, or third, and in some cases even a half of the value of the land.

BRETAGNE.—*Doll*.—A cyder country; but reckon the trees at no real value beyond that of the land, for they spoil as much as they produce.

Rennes.—A common proportion is to plant thirty trees upon a journal (about five roods English), which, if well preserved, will yield, on an average, 5 to 10 barriques of cyder every year; and the mean price 12 liv. the barrique, which is 120 pots; this year good orchards give 40 or 50 per journal, but they have produced none, or next to none, for four years past. The damage the trees do to the corn is so great, that, in common expression, they say they get none. The cyder is made by the press, which is of the same kind as Jersey, I suppose, brought from this country. The ground apples, and wheat or rye straw, in layers under the press, and reduced to such a desiccated state that they will burn freely immediately out of the press.

LORRAINE.—*Blamon to Savern*.—The whole country spread with fruit trees, apples, pears, &c. from 10 to 40 rod asunder.

AUVERGNE.—*Vaires*.—The valley of this place, situated in the Limagne, so famous in the volcanic history of France, is much noted for its fine apples, particularly the *rennet blanche*, the *rennet gris*, *calville*, and *apy*, all grafted on crab stocks.

Olives.

ROUSSILLON.—*Bellegard to Perpignan*.—Reckoned to pay 1 liv. each tree.

Pia.—The land under them fallowed every other year, and sown with corn: they are pruned in the fallow year, yielding no fruit; a crop being only in the corn year.

LANGUEDOC.—*Narbonne*.—Olives pay, in general, 3 liv. each tree per annum; some 5 liv. Many fields of them are planted in rows, at 12 yards by 10.

Beziers,

Beziers.—The trees on the farm, that was Monf. L'Abbé Rozier's, are 17 yards by 2.

Pinjean.—Some trees so large and fine are known to give 84lb. of oil in a year, at 10*s.* the lb. or 42 liv.; but they reckon, in common, that good trees give 6 liv. one with another; this epithet *good*, shews that the common average of all trees is much lower. In planting, if they mean to crop the land with corn, in the common manner, that is, one year in two, the other fallow, they put 100 trees on 8 *feterées* of land; but if they intend to have no corn at all, the same number on 4 *feterées*: under corn, the 8 *feterées* yield 40 septiers of corn, each 100 lb. at 9 liv. (7*s.* 10½*d.*). The *feterée* is about half an acre, as I conclude, from the best intelligence I could procure. This proportion is 100 trees on four English acres, or 25 per acre: if they were all good, the produce in oil would be 150 liv. and of wheat 90 liv.—in all 240 liv. or 10*l.* 10*s.*; the half only of which is annual produce, or 5*l.* 5*s.* which seems not to be any thing very great, even supposing the trees to be all good, which must be far from the fact.

Montpellier to Nîmes.—The trees are 3 rods asunder, by 1½; also 2 by 1½; both among vines; also 2 square; also 1 by 1½.

Pont de Gard.—Planted at 1 rod and 1½; their heads almost join. They are all pruned to flat round heads, the centre of the tree cut out, cup-fashion; and these formal figures add to the ugliness of the tree.

VIVARAIS.—*Aubenas.*—In passing south from Auvergne, here the first olives are met with.

DAUPHINE.—*Piere Latte to Avignon.*—Many; but seven-eighths dead from the frost, and many grubbing up.

PROVENCE.—*Aix.*—Land planted with olives sells at 1000 liv. the *carterée*, whilst arable only 600 liv. but meadows watered 1200 liv. Clear profit of a *carterée* of olives, 40 liv. (21,600 feet, at 40 liv. it is 3*l.* 2*s.* 1*d.* per English acre). Gathering the olives 40 liv. 10*s.* the quintal: pressing 2 liv.: cultivation 18 liv. the *carterée*: the wood pays the pruning.

Tour d'Aigues.—The olive, pomegranate, and other *hard* trees, as they are called here, bear fruit only at the end of the branches; whence, they conceive, results the necessity of their being pruned every other year. Thirty years ago, the common calculation of the produce, per olive, was 5*s.*; but now, the price being double, it may be supposed 10*s.*

Toulon.—They have great trees in this neighbourhood that are known to yield 20 liv. to 30 liv. a tree, when they give a crop, which is once in two years, and sometimes once in three. Small trees yield 3 liv. 5 liv. and 6 liv. each, and are much more profitable than mulberries, for which tree the soil is too dry and stoney. Olives demand as great an expence in buildings, presses, coppers, backs, &c. as vines. Pressing comes to 3 liv. a barrel. Crop of a large tree, 8

to 10 pannaux. Olives, in Provence, never pruned into the hollow cup-form, which is so general in Languedoc: they appear here in their natural form.

Hyeres.—They produce considerably in twenty or thirty years, and some have been known to be a hundred years old. I saw, going to *Notre Dame*, some that resisted the frost of 1709. A good tree, of thirty years, gives, when it bears, 3 pannaux of olives; the pannaux holds 30 lb. to 32 lb. of wheat, and the common price is 24*s.* the pannaux. They have great trees, that give a *mot*, or 20 pannaux, or 24 liv. each tree. When fields, planted with olives, are bought, they are measured by the square canne or toise; a canne of good land, well planted, 30*s.*; middling, 20*s.*; bad, 10*s.*; but there are some that sell to 60*s.*; consequently a middling arpent is 900 liv.

Antibes.—The largest trees I have seen in France are between this place and the Var, as if the near approach to Italy marked a vegetation unknown in the rest of the kingdom.

The culture of this tree is found in so small a part of France, that the object is not of very great consequence to the kingdom; one should, however, remark, that in Provence, where the best oil in Europe is made, there might be twenty trees to one that is found there; whence we may conclude, that if it were so profitable a husbandry, as some authors have represented, they would be multiplied more. The most important point is, their thriving upon rocky soils and declivities, impenetrable to the plough; in which spots too much encouragement cannot be given to their culture.

Oranges.

PROVENCE.—*Hyeres.*—This is, I believe, the only spot in France where oranges are met with in the open air: a proof that the climate is more temperate than Rouffillon, which is more to the south; the Pyrennees are between that province and the sun; but Hyeres lies open to the sea; so indeed does the coast of Languedoc; and so does Antibes; but there is a peculiarity of shelter at Hyeres, from the position of the mountains, that gives this place the advantage. I always, however, doubt whether experiments have been made with sufficient attention, when these nice discriminations are pretended, that are so often taken on trust without sufficient trial. The dreadful frost of last winter, which destroyed so many olives, attacked the oranges also, which were cut down in great numbers, or reduced to the mere trunk; most of them, however, have made considerable shoots, and will therefore recover.

The King's garden here, in the occupation of Monsr. Fine, produced, last year, 21,000 liv. in oranges only, and the people that bought them made as much by the bargain; the other fruits yielded 700 liv. or 800 liv.: the extent of
this

Pomegranates.

Pines.

St. Vincent's.—Here pines are cut for resin, at the age of fifteen to twenty years; the first year at about 2 feet from the ground, the second to 4 feet, the third to 6 feet, and the fourth to 8 or 9 feet; and then they begin again at bottom, on another side of the tree, and continue thus for 100 years: the annual value per annum in resin, 4*s*. or 5*s*. When they yield no longer, they cut into good plank, not being spoiled by tapping. Much tar also is made, chiefly of the roots. Cork trees are barked once in seven years, and yield then about 15*s*. or about 2*s*. per annum. Men are appointed, each to a certain number of trees, to collect the resin, with spoons, out of the notches, cut at the butt-end of the tree to receive it.

Tartafs.—Several persons united in asserting, that the pines give, one with another, 4*s.* to 5*s.* each, from 15 to 100 years old, and are then sold, on an

L 2 average,

average, at 3 liv. each; that taking the resin was so far from spoiling the tree, that it was the better, and cut into better planks. This surprising me, I sought a carpenter, and he confirmed it*. They added, that an arpent of pines was worth more than an arpent of any other land in the country; more even than of vines: that it would sell, according to the trees, from 500 liv. to 1000 liv. while the inclosed and cultivated sands would not yield more than 300 liv. or, at most, than 400 liv. The arpent, I found, by measuring a piece of 2 arpents, to be 3366 English yards (500 liv. is 311. 10s. per English acre).

St. Severe.—Pass several inclosures of sandy land, resembling the adjoining wastes, sown with pines as a crop; they are now of various heights; and very thick. See some very good chesnut underwood on a white sand.

GUIENNE.—Langon.—Many of the props used for their vines here, are young pines, the thinnings of the new sown ones; are sold for 36 liv. to 40 liv. the thousand, or twenty bundles, each fifty pines.

Cubzac to Cavignac.—On the poorest lands sow pines, which are not an unprofitable article of culture. At five years old they begin to thin them for vine props; and the small branches are sold in faggots. At fifteen years the produce is more considerable; and at twenty-five the best trees make boards for heading casks. I saw a journal and half, the boards of which yielded 1200 liv. They sow 135 lb. of wheat seed on a journal. Several crops of sown pines very thick.

BRETAGNE.—Quimperley to L'Orient.—Pines abound in this country, and seem to have sown themselves all around; but none are cut for resin.

To Vannes.—Such a scattering of them, that I apprehend all this country was once pine land.

AUVERGNE.—St. George.—In the mountains, see immense pine planks laid by way of fences, not less than 60 feet long, and 2 and 2½ broad.

Fix.—Dr. Coiffier has them in the mountains 80 feet high, and 10 feet round.

PROVENCE.—Cuges to Toulon.—In the rocky mountains of this coast, there are pines, and such as are of any size are cut for resin; but they stand too thin to yield an acreable produce of any account.

Cavalero to Frejus.—The mountains here are covered chiefly with pines, and have a most neglected desert appearance.

To Estrelles.—The same; and hacked and destroyed almost as badly as in the Pyrennees.

Pines are justly esteemed a profitable crop *for the landlord*, for they yield a regular and certain revenue, at a very little charge; no repairs, and no losses, by

* M. Secondat makes the same observation, *Mem. sur l'Hist. Nat. du Chene.* Folio. 1785. P. 35. The same assertion is made in *Mémoire sur l'Utilité du defrichement des Terres de Castelnau-de-Medoc.* 4to. 1791. *Réponse au Rapport*, p. 27.

failure of tenants. But, in regard to the nation, pines, like most of the poor woods of France, should be reckoned detrimental to the public interest, since a kingdom flourishes by *gross produce*, and not by *rent*.

Poppies.

ARTOIS.—*Lillers.*—Much cultivated for oil: they are called here *zuliette*. Get as good wheat after them as after coleseed.

Aras.—Many here; they are reckoned to yield more money per arpent than wheat; equal to coleseed; which, however, is a very uncertain crop.

LORRAINE.—*Nancy to Luneville.*—Some fine pieces on a poor gravel.

ALSACE.—*Savern to Wiltenheim.*—Many poppies; some fine crops, and very clean.

Strasbourg.—Product three sacks, at 24 liv. per arpent, of 24,000 square feet (41. 19s. 9d. per English acre). Manure for them, and sow wheat after.

Our ideas of the exhausting quality of certain plants, are, at present, founded, I believe, but upon that half-information which is scarcely a degree above real ignorance. It is a common observation, that all plants whose seeds yield oil, are exhausters of soil; an observation that has arisen, from the theory of oil being the food of plants. Experiments upon both have been so few and unsatisfactory, as to be utterly insufficient for the foundation of any theory. Coleseed, seeded in England, is almost generally made a preparation for wheat; so it is in France, and we here find the same effect with poppies. It can hardly be believed, that wheat, which demands land in heart as much as almost any other crop, should be made to follow such exhausting plants as the theory of oil would make one believe these to be; it is the organization of the plant alone that converts the nourishment into oil; which, in one plant, turns it to a saccharine substance, and, in another, to an acid one; but the idea that plants are fed by oil, and that they exhaust in proportion to their oil, is absolutely condemned by the olive, which yields more oil than any other plant, and yet thrives best on dry arid rocky soils, of absolute poverty, as far as oil is concerned. We shall be wholly in the dark in this part of agriculture, treated as a science, till experiments have been greatly multiplied.

Potatoes.

ANJOU.—*Angers to La Fleche.*—More than is common in France.

LORRAINE.—*Pont a Mouson.* Throughout all this part of Lorraine there are more potatoes than I have seen any where in France; twelve acres were at once under the eye.

To Nancy.—Many cultivated through all this country, but degenerated, by being sown too often on the same land; and for want of new sorts. A journal yields 20 toulins, or about 24 bushels English; and $2\frac{1}{2}$ journals are equal to an arpent de France, which makes the acreable produce miserable. Price now, 3 liv. the toulin; was only 25s.

Luneville.—More still; they plant them, after one ploughing, in April: for seed, cut the large ones only; but sell the smaller ones uncut. Always dung much. Every man that has a cow, keeps the dung carefully for this crop; and such as have no land, plant on other people's, without paying rent, that being the preparation for wheat: the crop of that grain is, however, very moderate, for the potatoe pumps much, to use the French expression,—*i. e.* exhausts greatly. Poor light soils answer best for them, as they are found not to do on strong land. Product per journal, 30 to 50 *rasaux*, which measure contains 180lb. of wheat. I found an exact journal, by stepping, to be 1974 English yards, or about 65 rods. At 40 *rasaux*, each 3 English bushels, it is nearly about 300 bushels English per acre. The price is now, 7 liv. the *razal*, heaped; when low, 3 liv.; and in common, 4 liv. 10s. The culture increases much.

ALSACE.—*Savern to Wiltenheim.*—Many, and good potatoes.

Strasbourg.—Produce of an arpent, of 24,000 feet, 75 sacks to 100, at 36s. to 60s. (at $2\frac{1}{2}$ liv. and 90 sacks, it is 15l. 10s. 7d. per English acre). Sow wheat after them, if manured, otherwise barley. In the mountains they pare and burn for them.

Schelestat.—Produce 50 or 60 sacks, at 3 liv. but 4 liv. or 5 liv. sometimes (55 sacks, at $3\frac{1}{2}$ liv. are 13l. 5s. 10d. per English acre). In planting, they think the difference is nothing, whether they be set cut or whole. The people eat them much.

Befort.—The culture continues to this place.

FRANCHE COMPTE.—*Besançon.*—And a scattering hither.

Orechamps.—Now lose the culture entirely.

AUVERGNE.—*Villeneuve.*—In these mountains they are cultivated in small quantities.

VELLAY.—*Le Puy to Pradelles.*—Ditto.

To Thuytz.—They are met with every where here.

DAUPHINE.—*St. Fond.*—Many are cultivated throughout the whole country; all planted whole; if sliced, in the common manner, they do not bear the drought so well. They are plagued with the curl.

These minutes shew, that it is in very few of the French provinces where this useful root is commonly found; in all the other parts of the kingdom, on inquiring for them, I was told, that the people would not touch them: experiments have been made, in many places, by gentlemen with a view to introduce them

them for the poor, but no efforts could do it. The importance, however, would be infinite, for their use in a country in which famine makes its appearance almost periodically, arising from absurd restrictions on the corn trade. If potatoes were regularly cultivated for cattle, they would be ready for the poor, in case of very high prices of wheat; and such forced consumption would accustom them gradually to this root; a practice in their domestic œconomy, which would prevent much misery, for want of bread. This object, like so many others, can only be effected by the exhibition of a large farm, highly stocked with cattle, by means of potatoes; and the benefit, in various ways, to the nation would make such an exhibition exceedingly advantageous. But such establishments come not within the purview of princes or governments in this age: they must be enveloped in the mist of science, and well garnished with the academicians of capitals, or nothing can be effected.

Racine de Disette.

ISLE OF FRANCE.—*Dugny*.—This plant, the *beta cycla altissima* of Linnæus, Monf. Cretté de Paleuel has cultivated with attention: he has tried it by transplantation, as directed by Monf. l'Abbé de Commerell; also by sowing the seed broadcast where it remains; and likewise seed by seed, in squares of 15 inches; and this last way he thinks is the best and most profitable. The common red beet, which he has in culture, he thinks yields a larger produce; but it does not yield so many leaves as the other, which is stripped thrice in the summer by the hand, an operation which may answer where labour is excessively cheap; but I have my doubts whether the value in England would equal the expence of gathering and carriage. Cows and hogs, Monf. Cretté has found, will eat the roots readily, but he has made no trial on it in fattening oxen or feeding sheep.

ALSACE.—*Schelestat*.—The culture is common in this country: I viewed three arpents belonging to the master of the post, which were good and clean. They gather the leaves by hand for cows, and then return and gather again, and the roots are the best food for them in winter; they come to 8 lb. and 10 lb. and are sown and planted like tobacco.

Rice.

DAUPHINE.—*Loriol*.—Sixty years ago the plain of Livron, one mile from Loriol, and half a league from St. Fond, more than a league long and a league broad, was all under rice, and succeeded well, but prohibited by the parliament, because prejudicial to health.

Saffron.

Saffron.

ANGOUMOIS.—*Angouleme*.—The best land for this crop is reckoned that which is neither strong nor stoney, but rich and well worked; plant the rows six inches asunder, and two inches from plant to plant; sow wheat over the planted land, and gather the Saffron among the wheat; blossom at All-Saints, when they gather it. In a good year, and on good land, a journal yields 3 lb. which sells, when dear, at 30 liv. per lb. but is sometimes at 16 liv.: lasts two years in the ground, after which it is removed. They assert, that the culture would not answer at all if a farmer had to hire labour for it; all that is planted is by proprietors.

Tobacco.

FLANDERS.—Most farmers, between Lille and Montcafiel, cultivate enough for their own use, which is now (November) drying under the eaves of their houses.

ARTOIS.—*St. Omers*.—Some pieces of tobacco, in double rows, at 18 inches and 2 feet intervals, well hoed.

Aire.—A crop is worth three times that of wheat on the same land, and at the same time prepares better for that grain than any thing.

ALSACE.—*Straßbourg*.—Much planted in all this rich vale, and kept very clean. Product 8 to 10 quintals per arpent of 24,000 feet, at 15 liv. to 30 liv. per quintal (9 at 23 liv. is 14l. 6s. 2d. per English acre). Sow wheat after it; and the best wheat is after tobacco and poppies.

Benfeldt.—Great quantities here, and all as clean as a garden.

Schelestat.—Produce 6 quintals to 8 per arpent, at 16 liv. the quintal (8l. 15s. 7d. per English acre). This they reckon the best crop they have for producing ready money, without waiting or trouble. There are peasants that have to 600 quintals. They always manure for it. They sow it in March on a hot bed covered with mats; begin to plant in May, and continue it all June and the beginning of July, at 18 inches or 2 feet square, watering the plants in a dry season. When 2 feet high, they cut off the tops to make the leaves spread. Their best wheat crops follow it.

Tobacco, as an object of cultivation, appears in these notes to very great advantage; and a respectable author, in France, declares, from information, that, instead of exhausting the land, it improves it like artificial grasses*; which seems to agree with my intelligence; yet the culture has been highly condemned by others. Mr. Jefferson observes thus upon it; "it requires an extraordinary

* *De l'Administration Provinciale par M. le Trone.* Tom. i. p. 267.

degree of heat, and still more indispensably an uncommon fertility of soil: it is a culture productive of infinite wretchedness: those employed in it are in a continued state of exertion, beyond the powers of nature to support: little food of any kind is raised by them; so that the men and animals, on these farms, are badly fed, and the earth is rapidly impoverished. The cultivation of wheat is the reverse in every circumstance: besides cloathing the earth with herbage and preserving its fertility, it feeds the labourers plentifully; requires from them only a moderate toil, except in the season of harvest; raises great numbers of animals for food and service, and diffuses plenty and happiness among the whole. We find it easier to make an hundred bushels of wheat than a thousand weight of tobacco, and they are worth more when made*." This authority is respectable; but there are circumstances in the passage which almost remove the dependence we are inclined to have on the author's judgment. The culture of wheat preserving the fertility of the earth, and raising great numbers of animals! What can be meant by this? As to the exhausting quality of wheat, which is sufficient to reduce a soil almost to a *caput mortuum*, it is too well known, and too completely decided, to allow any question at this time of day; and how wheat is made to raise animals we must go to America to learn, for just the contrary is found here; the farms that raise most wheat have fewest animals; and in France, husbandry is at almost its lowest pitch, for want of animals, and because wheat and rye are cultivated, as it were, to the exclusion of other crops. Tobacco cannot demand an uncommon degree of heat, because it has been cultivated on a thousand acres of land successfully in Scotland: and as to the demanding of too great exertions, the free hands of Europe voluntarily addict themselves to the culture; which has nothing in it so laborious as reaping wheat. I take the American case to be this; ill husbandry, not tobacco, exhausted the land; they are now adopting wheat; and, if we may judge from the notions of the preceding quotation, that culture will, in a few years, give the finishing stroke to their lands; for those who think that wheat does not exhaust, will be free in often sowing it, and they will not be long in finding out what the result will prove.

Mons. Bolz, in Switzerland, says, that they are disgusted with the culture of tobacco, because it exhausts their lands: half an arpent gave 5 to 6 quintals of leaves†. Estimated grossly, this may be called a thousand weight per acre, which Mr. Jefferson compares with 100 bushels of wheat; a quantity that would demand, in England, four acres of land to yield; and, as American crops do not yield in that proportion, it is one acre of tobacco being as expensive as five or six of wheat, which surpasses comprehension.

* *Notes on the State of Virginia.* P. 278.

† *Mem. de la Société Oeconomique de Berne.* 1763. Tom. I. p. 87.

The Straßbourg produce of 9 quintals, in the notes above, equal 15 cwt. per English acre. The Schelestat produce of 7 quintals is about 12 cwt. per acre.

Dr. Mitchel, many years before Mr. Jefferfon, gave the same account of the exhausting quality of tobacco *.

The cultivation is at present spreading rapidly into countries that promise to be able to supply the world. In 1765, it was begun to be cultivated in Mexico, and produced, in 1778, to the value of 800,000*l.* and in 1784, 1,200,000*l.*†

Turnips.

GUIENNE—*Anspan to Bayonne.*—*Raves* are, in these waste tracts, at the roots of the Pyrennees, much cultivated; they manure for them, by burning straw, as described under the article manure; weed, and, as they told me, hoe them; and have some as large as a man's head. They are applied entirely to fattening oxen. Maiz is sown after them. The people here knew of the orders given by the King, for cultivating this plant, but I could not find they had had any effect. The practice obtained here before the two last severe years, which were the occasion of their increasing it, much more than any orders could do.

FLANDERS.—*Valenciennes to Orchies.*—Many fields of this root, but quite thick, though it was said they have been hoed; these are all after-crops, sown after corn.

NORMANDIE.—*Caen.*—In going to Bayeaux, many, both flourishing and clean, though too thick; but, on inquiry, found them all for the market, and none for cattle or sheep. I thought the colour of the leaf differed from our own, and got off my horse more than once to examine them. They are the *raves* of the south of France; the roots, which ought to have been of a good size, were carrot-shaped and small.

BRETAGNE.—*Belle-Isle to Morlaix.*—Here is an odd culture of *raves* amongst buckwheat; sown at the same time, and given to cows and oxen, but the quantity is very inconsiderable.

Morlaix.—Get their best turnips after flax, sometimes to a very good size; but, for want of sufficient thinning the crops, in general, very small roots must be produced; yet the leaves large, healthy, and vigorous. They sow them also amongst buckwheat; but the product is trifling, and the use but momentary, as they plough the land for wheat.

ANJOU.—*Mignéville.*—If one were to attend only to conversation, without going into the fields, a stranger would be persuaded that the culture of turnips

* *Present State of Britain and North America.* 8vo. 1767. P. 149, 151.

† *Bourgoanne's Travels in Spain*, vol. i. p. 368.

flourished here: they actually give some, and cabbages too, to their cows, for every man has a scrap: but sown quite thick, and the largest I saw not bigger than a goose egg; in general not a fourth of that size; and the largest piece I saw was half an English acre. They have, in like manner, patches of a sort of kale, which is the *chou de Poitou*; this is instead of the *chou d'Anjou*, of which the Marquis de Turbilly speaks so much; and which is quite neglected in this country now, in favour of this Poitou cabbage, that is found to produce many more leaves. To me it, however, appears inferior to the *chou de Vache* of Flanders.

To La Fleche.—A scattering of miserable *raves* all the way.

ALSACE.—*Schelestat to Colmar*.—Some scattered pieces, but in very bad order; and none hoed, which they ought to have been three weeks before I saw them.

AUVERGNE.—*Issoire*.—*Raves* are cultivated for cattle, but on so small a scale, that they scarcely deserve mention. They sow them also among buckwheat, which is *drawn by hand, when in blossom, for forage*, and the *raves* left. No hoeing, but some are weeded.

Brioude.—Many *raves*, and cultivated for cattle: common to 2 lb. weight.

St. George's to Villeneuve.—Many *raves*, but miserable poor things, and all weeds.

Perhaps the culture of turnips, as practised in England, is, of all others, the greatest desideratum in the tillage of France. To introduce it, is essential to their husbandry; which will never flourish to any respectable extent, and upon a footing of improvement, till this material object be effected. The steps hitherto taken by government, the chief of which is distributing the seed, I have reason to believe, failed entirely. I sent to France, at the request of the Count de Vergennes, above an hundred pounds worth of the seed; enough for a small province. When I was at Paris, and in the right season, I begged to be shewn some effects of that import; but it was all in vain. I was carried to various fields, sown thick, and absolutely neglected; too contemptible to demand a moment's attention. Not one acre of good turnips was produced by all that seed. It is with turnips, as in many other articles; a great and well cultivated English farm, of 700 or 800 acres, should be established, on an indifferent soil; and 200 acres of turnips cultivated upon it, and eaten on the land by sheep, should every year be exhibited; and a succession of persons educated on such a farm, dispersed over the kingdom, would do more to introduce the culture than all the measures yet attempted by government.

Walnuts.

BERRY.—*Verson to Vatan*.—Many of these trees spread over the country, which yield a regular revenue by oil.

QUERCY.—*Souillac*.—Walnut-oil cake the finest food of all for fattening oxen. They export pretty largely of this oil, the trees being every where.

ANGOUMOIS.—*Rignac*.—Walnuts spread over almost every field.

Ruffec.—A common tree yields a boisseau of nuts; sold at 3 liv. or 4 liv.; but a good tree 3 boisseau. All for oil, which the people eat in soups, &c.

POITOU.—Many through all parts of the province, which I passed in crossing it. Oil universally made from them. This year (1787) all were so frozen, that the crop will be very small; sometimes get 16 boisseau a tree, even to 20 boisseau; the boisseau sells generally at 20*s*. There is, on an average, one tree to an acre. One tree gives 5 or 6 measures of nuts, and each measure makes something more than a pint of oil, which sells at 18*s*. or 20*s*.

ANJOU.—Across this whole province they are found every where, but none through Bretagne.

ALSACE.—*Isenheim*.—Great numbers spread all over the country; for oil.

BOURBONNOIS.—*Moulins*.—Some estates have a good many scattered trees; the oil sells at 12*s*. the lb.

AUVERGNE.—*Clermont*.—Many in every part of the country; a prime tree will, in a good year, give 20 lb. and even 30 lb. of oil; one of ten years 6 lb.; common price 6*s*. per lb.

Lempde.—Here they finish; as we advance from this village, no more are met with.

Various Plants.

QUERCY.—*Brives*.—Figs we met with here for the first time; they are scattered over the vineyards, and wrapped up in mats, to preserve them from frosts.

Creissensac.—*Gieyse* much cultivated here; it is the *lathyrus setifolius*. Also *jarash*, the *vicia latharoides*. They sow them both in September and the spring, which are generally used, mown green, for soiling.

Souillac.—They have no meadows in many districts of this country, but supply the want by the above-mentioned plants, which are always used green. They do not answer equally in hay, as it is said that the leaf falls off in drying.

Cabors.—Near this place meet with four new articles of cultivation; one a *vicia sativa* varietas; another the *cicer arietinum*; the third the *ervum lens*; and the fourth the *lupinus albus*.

Caussade.—Here the *trifolium rubens* is cultivated, and continues through all the Pyrennees.—On all these articles I must, however, observe, that they do not seem to equal, for soiling, the common winter-vetch, which we cultivate so much in England; nor lucern, so successfully sown in France.

GUIENNE.

GUIENNE.—*Triticum Repens*. Upon the banks of the Garonne I met women loaded with the roots of this plant, going to sell it at market; and they informed me it was bought to feed horses with. It is applied to the same use at Naples. It grows with great luxuriance at Caygan Solo, in latitude 7*; and being the great plague of English husbandry, may be called a universal grower. It seems, from a late account†, as if they cultivated it in the island of Nantucket, in America.

ISLE OF FRANCE.—*Dugny*.—Monf. Cretté de Paleuel gave me some notes of experiments he had made on various plants, in drying them for hay.

The *epilobium angustifolium* makes hay that is readily eaten by sheep, and loses half in drying. They are very fond of the hay of the *spirea ulmaria*, the *litum salicaria*, *thalictrum vulgare*, *pucedanum silaus*, and *centaurea jacea*; all these lose half, when made into hay; the *althæa officinalis* two-thirds. Monf. Cretté is of opinion, from his trials, that these plants may be very useful in cultivation, for hay. He found, at the same time, that an arpent of wet meadow gave 13,200 lb. of green herbage, which lost two-thirds in drying. An arpent of winter-vetches 17,800 lb. green.

The common sun-flower he has also cultivated; he plants it in rows, at two feet asunder, and one foot from plant to plant; an arpent containing 16,200 plants; the leaves he gives to cows, the flowers may be used for dying; of the stems he makes vine props, or for French beans, and afterwards burns them; and of the seed he makes oil, which leaves a cake good for fattening cattle. Six perch of land, each of 18 feet square, has given him 22 boisseau of seed, the boisseau $\frac{1}{12}$ of the septier, that contains 240 lb. of wheat; but the crop exhausts the land exceedingly, and small birds devour the seed greedily.

The same gentleman compared cabbages and potatoes, in alternate rows: an arpent gave (half the ground) 62 septiers of potatoes, which weighed 14,880 lb.; the cabbages on the same land, in number 5400, weighed 25,500 lb.

Dammartin.—Summer-vetches cultivated here, they are mown for hay, and yield 800 to 1000 bottes per arpent; 1100 have been known.

ARTOIS.—*La Recouffe*.—Winter-vetches are found on every farm, on the good land from Calais to St. Omer: oats are mixed, to keep them up; and every one soils his horses in the stable.

Ais.—Some hops here.

ANJOU.—In the way from Angers to La Fleche, the number of citroules is very great, even to acres, and the crop extremely abundant; the metayers feed their hogs with them.

* *Forest's Voyage to New Guinea*, p. 16.

† *St. John's Letters of an American Farmer*. 8vo. 1782. P. 207.

AUVERGNE.—*Brioude*.—Jarouffe every where sown, the end of August or beginning of September, for hay.

DAUPHINE.—*Loriol*.—The *melilotus sibirica*, from Mons. Thouin, at the King's garden, at Paris, makes, in the garden of Mons. Faujas de St. Fond, a most superb figure; nobody can view its prodigious luxuriance without commending the thought of cultivating it for cattle. The *coronilla varia*, a common plant here, and of such luxuriance, that it is hardly to be destroyed. The *bedysarum coronarium* does well here.

PROVENCE.—*Cuges*.—Capers are here met with, for the first time, in going from Marseilles to Italy. It is a low bush, planted in squares of about 5 or 6 feet. This year they yield nothing, because damaged by the frost; but, in common, more profitable than vines; they mentioned 1 lb. per tree, at 30*s*.

Toulon.—Capers are not so profitable as vines. The bushes here are planted at 6½ or 7 feet square; and a good one will give 1½ or 2 lb. of capers; but the price varies prodigiously, from 30 liv. or 40 liv. to 120 liv. the quintal; average, 30 liv. or from 6*s*. to 20*s*. the pound.

Hieres *.—Capers here are planted in squares, at 6, 7, and 8 feet; each good bushel yields 2 lb. from 6*s*. to 24*s*. the pound; but, in a gross estimate of a whole crop, are not supposed to pay more than 6*s*. to 10*s*. per bushel.

Grasse.—Here is one of the most singular cultures to be met with, that of plants for making perfumes; whole acres of roses, tuberoses, &c. for their flowers, and a street full of shops for selling them: they make the famous otter of roses, as good and as clear as from Bengal; and it is said now to supply all Europe.

LYONNOIS.—The fromental of the French (*avena elatior*) is cultivated in this part of France, and in some districts of Franche Comté. The seed is commonly sold by the seedsmen, at Lyons, of whom I bought some to cultivate in England. The first person who mentioned it publicly was, I believe, Mons. Miroudot, who wrote an essay upon it, in which he fell into an error, copied by many of his countrymen †, namely, that of calling it the ray-grass of the English. The great botanist, Haller, was mistaken in supposing it the *avena flavescens* ‡. King Stanislaus made some experiments on it in Lorraine. In Bretagne || it has been found to yield ten times the produce of common meadows. That it is very productive cannot be doubted, but it is a very coarse grass: how-

* The natural historian of Provence mentions a singular profit by this plant, at Hieres, of 200 cannes square giving 200 liv. net, while the same breadth, in common husbandry, only 18 liv. *Mem. pour servir a l'Hist. Nat. de la Provence*, par M. Bernard. 8vo. Tom. i. p. 329.

† *Bommarre Dict. d' Hist. Nat.* Tom. ii. p. 565; v. p. 225.

‡ *Mem. de la Soc. de Berne.* 1770. P. 16.

|| *Corps d'Observ. de la Soc. de Bretagne.* 1759, 1760. P. 44, 45.

ever, it merits experiments, and ought to be tried upon a large scale, as the qualities of plants cannot be ascertained upon a small one.

Citroules, in this province and the neighbouring ones, are cultivated largely, and rarely fail. They may be preserved until the beginning of January: oxen, cows, and hogs eat them freely; for lean cattle they are given raw, but commonly boiled for fattening: from 10 lb. to 20 lb. a day, given to cows, soon shews the effect in the quality of milk. For fattening an ox, in Bresse*, with them, they mix the citroule with bran or pollard, or flower of buckwheat, and boil them together, and give 35 lb. to 40 lb. to each beast per diem. In some places they apply them to feeding carp. The poor people eat them in soup, in most parts of the kingdom, but not in great quantities.

CHAP. XIV.

Of the Waste Lands of France.

SOLOGNE.—**T**HERE is, in this province, such a large mixture of waste, even in the most cultivated parts, and cultivation itself is carried on upon such barbarous principles, that there will not be much impropriety in considering the whole as waste; to every spot of culture called a farm, a much greater proportion of rough sheep-walk and wood (eaten down and destroyed) is annexed; so that any good farmer, who got possession of 1000 or 1500 acres, would conclude the whole as waste, and treat it accordingly: by much the most unproductive and poorest part of such a tract would, in every case, be the lands at present under the plough. I may, in confirmation of this general idea, add, that there are many absolute wastes in France, that yield as good, and even a better produce than all Sologne, acre for acre. I know no region better adapted for a man's making a fortune by agriculture, than this; nothing is wanted but capital, for most of the province is already inclosed.

BERRY.—*Chateauroux*.—Leaving this place for the south, enter vast heaths of ling and furz, but much mixed with trefoils and grasses. Some small parts of these heaths are broken up, and so ill ploughed, that the broom and furz are in full growth. After this another heath, of several miles extent, where

* *Observ. et Exp. par Fenille*, p. 86.

the landlords will not give leave either to build or break up, reserving the whole for sheep, and yet not stocked; for the people assert, that they could keep twice the number, if they had them.

LIMOUSIN.—*To Limoges*.—The mountainous heaths and uncultivated lands are commons, and therefore every metayer sends his sheep in the common flock of the village.

BIGORRE.—*Bagnères de Luchon*.—The waste tracts of the Pyrennees, by which are to be understood, lands subject to common pasturage, are so much subject to the will of the communities, that these sell them at pleasure. Formerly the inhabitants appropriated to their own use, by inclosure and cultivation, what portions they pleased; but this obtains no longer; at present the communities sell these wastes, and fixing a price on them, nearly to their value, new improvements are not so common as heretofore.

LANGUEDOC.—*Narbonne to Nîmes*.—This vale, which is by far the richest of Languedoc, in productions, is of no considerable breadth, yet the quantity of waste neglected land in it is very great.

Monrejeau to Lann-Maison.—Vast wastes, covered with fern; the soil good; and land projecting into it cultivated to advantage.

Bagnères de Bigorre.—These immense fern-wastes continue for many miles, with many new improvements in them. They belong to the communities of the villages, which sell portions of them to any persons willing to buy. The price most common has been 20 liv. the journal, of 128 cannes square, the canne 8 pans; the pan 8 inches and 4 lines, 4 journals making an arpent. The method of improving has been, first to burn all the fern and rubbish, then to mattock it and sow rye, which is pretty good; then oats for six, seven, or eight years, according to circumstances; after that they summer-fallow and take wheat. Some they leave to grass and weeds, after those eight crops of oats; a detail of the husbandry of barbarians! They have all a right of commonage on the wastes, as long as these continue uninclosed; consequently can keep cattle, and especially sheep, to any amount in summer; yet, in their inclosed improvements, they give not a thought to raise winter food! Such stupidity is detestable. The parish of Cavare has 104,000 arpents of these wastes, without one metayer; all are peasant proprietors, who buy morsels as it suits them. The improvements are exempted from tithes for ten years; but not at all from the King's taxes, which is shameful.

BEARN.—*Pau to Moneins*.—Vast wastes of rich soil, covered with an immense product of fern, to the amount of five or six waggon loads an acre.

St. Palais to Anspan.—Vast wastes; belonging to the communities of the parishes, that sell them to whoever will buy: a common price 120 liv. per arpent; but after they are brought into culture, they sell for at least 300 liv. The advantages

vantages of this system, which extends through the whole region of the Pyrennees, is prodigious: it excludes the rights of commonage, because all is inclosed as fast as bought; and enables every industrious man, that saves a little money, to become a land proprietor, which is the greatest encouragement to an active industry the world can produce; it has, however, one evil, that of too great a population.

Bayonne to St. Vincents.—In this line I came first to the *landes* of Bourdeaux, because they extend from the gates of Bayonne to those of Bourdeaux, and of which I had read so much, that I was curious to view and examine them; they are said to contain 1,100,000 arpents*. They are covered with pines, cork-trees (only half the value of pines), broom, whins, ling, and furz; the soil sand, but the growth of trees shews a moist bottom. There is a good deal of cultivation mixed with the waste this first stage. There is much land also under water, a sort of sandy fen. Pass a great space, without trees, covered with dwarf furz, ling, and fern. Others before Dax; one of them of five or six miles long, by two or three broad: much rough grass and ling on it: but none of these tracts appear half stocked.

Dax to Tartas.—This district is a deep white sand, the whole of which has evidently been *lande*, but part of it inclosed and improved; much is, however, yet rough.—Singular scene of a blowing sand, white as snow, yet oaks growing in it two feet diameter; but a broken ground discovers a bed of white adhesive earth, like marl, which explains the wonder.

Learn at Tartas, that these immense wastes, the *landes*, without pines or wood, are to be purchased, at all times, very cheap indeed, of the King, the great lords, and of the communities of many parishes, even so low as 3 liv. per arpent, with an exemption from tithes, and from taxes for twenty years. But every one here reckons them so bad, that all the money spent would be sure to be lost; yet it is admitted, that there is a bed of marl or clay under all the country. This opinion is chiefly founded on the attempts of Monsr. Rollier, of Bourdeaux, having made a trial of cultivating them, and succeeded very ill. I guessed how such improvements had been attempted, and told my informants what I supposed had been done; and my guess proved exactly right: corn—corn—corn—corn; and then the land pronounced good for nothing. It does not signify telling such people, that the great objects, in all improvements of wastes, are cattle, and sheep, and grass, after which corn will be sure. Nothing of this kind is comprehended from one end of France to the other.

As I shall here take my leave of these *landes*, I may observe, that, so far as they are covered with pines, they are not to be esteemed wastes; but, on the contrary, occupied with a very profitable culture, that does not yield less than from 15s.

* *De la Necessité d'Occuper tous les gros Ouvriers*, p. 8.

to 25s. an acre annual revenue. Of the very extensive tracts not so employed, and which are to be purchased at so cheap a rate, they are among the most improveable districts in the kingdom, and might be made, at a very small expence, capable of supporting immense flocks of sheep.

Cavignac to Pierre Brune.—Many sandy wastes, with white marl under the whole.

To Chersac.—Great wastes, of many miles extent, covered with fern, ling, and shrubby oak; all greatly improveable.

To Montlieu.—Ditto. Many of these wastes belonged to the Prince of Soubise, who would not sell, but only let them; the consequence has been, that no improvements have been wrought.

La Graule.—The wastes in this country are sold at 10 liv. the journal, and less; some better at 30 liv. The journal here is to the English acre as ten to thirty-eight; it consists of 10 carraux, each 18 feet square.

NORMANDIE.—*Valogne to Cherbourg.*—Monsr. Doumerc, of Paris, having bought of Monsieur, the King's brother, 3000 arpents, part of 14,000 sold at the same time, being parcel of an ancient, but much neglected, forest, has made an improvement here, which, so far, deserves attention, as it shews the principles on which French improvers proceed. He has brought into culture 700 verges, which form his present farm, around a house for himself, and another for his bailiff, all built, as well as many other edifices, in much too expensive a manner; for these erections alone cost 2500 louis d'or. Such unnecessary expenditures in building is generally sure to cripple the progress in much more necessary matters. The first business in the improvement, was to grub up the wood; then to pare and burn; and manure with lime, burnt with the furz, fern, and heath of the land; the stone was brought from Valogne: as soon as it was cleared, it was fallowed the first year for wheat. Such infatuation is hardly credible! A man is commencing his operations in the midst of 3000 acres of rough ground, and an immense pasturage for cattle and sheep, begins with wheat; the same follies prevail every where: we have seen just the same course pursued in England, and prescribed by writers. Such people think cattle and sheep of no importance at the beginning of these improvements. This wheat, limed at the rate, per arpent, of 7 or 8 tonneaux, of 25 boisseau, each 18 pots of 2 pints; 4 boisseau of seed sown, and the crop 40 boisseau. After this wheat sown 5 boisseau of oats, the crop 40. Then barley, seed 4 boisseau, produce 20 to 25 boisseau. With this barley clover sown; mown the first year twice, and pastured the second; being then ploughed for wheat, which is inferior to the original crops; then oats and fallow again. From all these crops it is sufficiently evident, that French farmers esteem corn, and not cattle, the proper support of a new improvement. The soil which has been thus reclaimed,

claimed, is on a stone quarry in general; a friable sandy loam, covered with a strong spontaneous growth (where not forest) of furz, fern, and, in some places, heath; mixed with much grass, and even clover and *millefolium*; which, if properly stocked by cattle, well fed in winter, would be of considerable value in its present rough state.

Though the methods pursued have not been calculated on the best principles, yet there is certainly a considerable degree of merit in the undertaking. Last year's crop of wheat produced 40,000 gerbs: and this year (1787) there is one piece of oats, of 80 verges, which gives 12,000 gerbs, at 15 boisseau per hundred; each boisseau 40 lb. and the price at present 45*s*. The present stock, 207 wethers, 10 horses, 21 working oxen, 10 cows, 1 bull, 6 young cattle, are certainly fine, for a spot where, ten years ago, Mons. Baillio, the bailiff, who has executed the whole, and who seems to be a truly excellent man, was in a hovel, with no other stock than a dog. The whole improved, would now let at 15 liv. per verge, 2½ to the arpent.

BRETAGNE.—*Combours to Hédé*.—Pass an immense waste for a league, but to the left a dead level, boundless as the sea; high lands at one part, seemingly 8 or 10 leagues off. Every part which the road passes, has been under the plough, for the ridges are as distinct as if made but last year; and many ruined banks of hedges cross it in various ways. The spontaneous growth, furz, ling, and fern; the soil good, and equal to valuable crops, in a proper management. The King has part, Mons. de Chateaubriant part, and other seigneurs also; but every body I talked with says, it is good for nothing. Would to heaven I had 1000 acres of it at Bradfield! I would soon put that assertion to the test.

Rennes.—The waste lands, which, in almost every part of the province, extend for many leagues, are almost every where to be bought, in any quantity, of the seigneurs, at 10*s*. the journal, which is to the English acre as 47 to 38, with a small quit-rent per annum.

St. Brioux.—Inquiring here into the period of the cultivation which I every where remarked on the *landes* of Bretagne, I was told, that it was no antient culture, but common for peasants, who took them of the seigneurs, to pare and burn, with the *ecoubu*; exhaust; and then leave them to nature: and this for forty, fifty, and sixty years back. Rented for ever at 20*s*. to 30*s*. the journal.

St. Nazaire to Savanal.—Immense bog marked on all the maps of Bretagne, and filling the space of many leagues, covered with vast growth of bog myrtle, and coarse grasses, three or four feet high; what a field for improvement, in a climate that gives such a spontaneous growth!

To Nantes.—In the *landes*, which, strange to say, extend to within three miles of Nantes, there was an improvement attempted some years ago: four good houses of stone and slate are built, and a few acres run to wretched grass,

which have been tilled, but all savage, and become almost as rough as the rest: a few of the banks have been planted. This may be the improvement I heard of afterwards at Nantes, made by some Englishmen, at the expence of a gentleman, and all the parties ruined. I inquired how the *improvement* had been effected: pare and burn; wheat; rye; oats!!! Thus it is for ever: the same methods, the same failures, the same folly, the same madness. When will men be wise enough to know, that good grass must be had, if corn is the object?

Nantes.—I have now travelled round the vast province of Bretagne, and may observe, that so large a proportion of it is waste, as to be difficult to calculate: I have passed tracts of land, of three, four, five, and even eight miles in extent, without any cultivation, and I have heard of much more considerable, even to fourteen leagues in length. I have marked one district in the map which contains some hundred thousand acres. Three-fourths of the province are either waste, or so rough as to be nearly the same thing. This is the more surprising, as here are some of the first markets in France; that is to say, some of the most considerable commercial towns; and every where the vicinity of the sea. These enormous wastes, which are said to exceed two millions of arpents*, are found, as I have remarked, in my notes on the great road, within four miles of such a city as Nantes: vast districts are to be had on leases, or rather property for ever, on the payment of very slight fines. The soil is generally very improveable; I mean, convertible to cultivation, at a very small expence, and with great facility; contrary to the assertion of every body in the province, who have been so used to see it desolate, that they cannot readily believe it capable of a better husbandry than being burnt, exhausted, and left to nature. The means of improving these wastes are absolutely unknown in France, and not much better understood in England. The profit of the undertaking, however, when properly pursued, upon the never-failing principle of grass—sheep—cattle—corn; instead of the common blunder, which puts the cart before the horse (if I may use a vulgar proverb), will be found great and rapid.

ANJOU.—Turbilly.—In the journal-part of this work, I have explained the motives which carried me out of my road, to view the wastes of this vicinity, and particularly the improvements of the late Marquis of Turbilly, described at large in his *Memoire sur les Defrichemens*, which has been so often cited in almost every language.

The immense heaths, or *landes*, are, in general, a sandy or gravelly loam; some on a gravel, others on a clayey, and others on a marley bottom; and others, again, on imperfect quarry ones: the spontaneous growth would predominantly be every where forest, particularly of oak, if it were inclosed, and

* *De la Necessité d'Occuper tous les gros Ouvriers*, par Monf. Boncerf. 1789. P. 8.

preserved from depredation. At present, it is wood browsed and ruined, fern furz, broom, ling, &c. &c. In the desert state in which the whole country is left at present, the value is nothing else but what it yields to a few cattle and sheep; not the hundredth part of what might be kept, if any well regulated provision were made for their winter support. I passed ten miles over these heaths; they were, in some directions, boundless to the view; and my guide assured me, I might continue travelling upon them for many days. When at Tours, I was told of their extending much in that direction also. The climate is good. There are streams that pass through these wastes, which might be employed in irrigation, but no use whatever made of them; there are marl and clay under them, for manure; and there is every where to be found plenty of pasturage, for the immediate summer food of large flocks.—In a word, there are all the materials for making a considerable fortune——except skill and knowledge.

Such was the country in which the late Marquis of Turbilly sat down, at an early period of life, determining to improve his estate of 3000 arpents in these deserts; with all the necessary activity of disposition; every energy of mind; and that animated love of laudable attempts, to give life and efficacy to the undertaking. Some meadows and plantations, which he made, succeeded well, and remain; but, of all his improvements of the heaths, to the inconsiderable amount of about 100 arpents, hardly any other traces are now to be seen, except from the more miserable and worn-out appearance of the land; which, after cropping, was, of course, left in a much worse condition than if it had never been touched. The fences are quite destroyed; and the whole as much *lande* as before improvement. This flowed from the unfortunate error, so common, indeed so universal, among the improvers of waste lands; and unexceptionably so in France—that of improving, merely for the purpose of getting corn. Pyron, the labourer who worked in all the Marquis' improvements, informed me, that he pared and burnt, which is the common practice of all the country, and then took three crops of corn in succession; that the first was very good, the second not good, and the third good for nothing, that is, not above three times the seed: from that moment there was an end of improvement; it only crawled, during many years, to the amount of 100 acres; whereas, if he had begun on right principles, he would, in all probability, have improved the 3000; and, others copying his modes, the whole country might, by this time, have been under cultivation. It was reckoned a vast effort in him to fold 250 sheep: and this was the best engine he had in his hands; but giving the fold for corn, it was lost as soon as exerted. Instead of 250 sheep, the Marquis should have had 500 the first year, 1000 the second, 1500 the third, and 2000 the fourth; and all his paring, burning, manuring, folding, exerted to raise turnips (not
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their contemptible *raves*) to winter-feed them; with so much burning, folding, and eating off the turnips, the land would have been prepared for grass; and when once you have good grass, good corn is at your command. Thus corn was the last idea that should have entered his head: instead of which, like other French improvers, he rushed upon it at once—and from that instant all was ruined.

The particular advantages of the spot are considerable, if ever an improver should arise, with knowledge enough to pursue the methods that are adapted to the soil and situation. The hills of all the country are so gentle, that they are to be tilled with great ease; offering the advantage of perennial streams, that run at present to waste in the vales. There are rich veins of white marl, with an under-stratum, in many places, of clay. There is a hill of shell sand, for improving the stiffer soils and the moory bottoms. There is lime-stone at the distance of half a league, and plenty of peat to burn it. The Marquis of Galway's father spread some of the shell sand on a small poor field, and had an immediate luxuriance of crop in consequence. The present curé of the parish has tried the marl, with equal success. But both these manures, and indeed any other, would be absolutely lost, if a succession of corn crops were immediately to follow. It is this valuable under-stratum of clay and marl which gives such a growth to wood. In passing from La Fleche to Turbilly, I was amazed, in some spots, at the contrast between the apparent poverty of the surface soil, and the oaks scattered about it; they are, in general, eaten up by cattle, yet the bark is clean and bright, and this year's shoots four and even five feet long. A common mode, and indeed the only one, of attempting improvements here, is to permit the peasants to pare and burn pieces of the heath; to take five crops in succession, but to leave the straw of the last; to fence the piece around; and to sow whatever seeds of wood the landlord provides, usually oak, for a copse, which, in this villainous way, succeeds well; but as such copses are fenced with a ditch and bank only, and never any hedge planted, they are presently open and eaten.

MAINE.—*Gueffelard*.—The *landes* of Anjou extend over a great part of Maine also. Here they told me, that the extent in that neighbourhood is hardly less than sixty leagues in circumference, with no great interruption of cultivation. The account they give of the soil is, that it is absolutely good for nothing but to produce wood, which it will do very well. The seigneurs fief it out for ever, in any quantity, at the rent of half a bushel of oats an arpent (the bushel 30 lb. of wheat), and some at 10*s*. to 20*s*. The peasants pare and burn, and get a very fine crop of rye; then another poor crop of rye; and after that a miserable one of oats; reckoning, in common, that a burning will give just three crops; after which the land is strictly good for nothing, but is left to nature

ture to recover itself. The price of paring and burning 30 liv. per arpent. I can hardly record these instances of barbarism with tolerable patience—without dealing execrations, not against a poor unenlightened peasantry, but against a government possessing, in demesne, immense tracts of these lands, without ever ordering any experiments to be made and published, of the best methods of improving them. But had it come into any such project, and had those experiments had French conductors, they would have been merely with a view of getting corn! corn! corn!

To Le Mans.—Much of these wastes here resemble the sands of Sologne; upon a dead level, and water standing in many places; yet the soil a sand; and, in spots, even a running one: it arises from the same circumstance which makes them productive of oak timber, wherever preserved, viz. the bottom of clay and marl.

BOURBONNOIS.—*Moulins.*—Three-fourths of the whole province waste, or heath, or broom, or wood.

St. Pourçain.—As I quitted the Bourbonnois in this vicinity, entering Auvergne, it will not be improper to remark, that the whole province, as well as that of Nevernois, ought, respecting all the purposes of improvement, to be deemed waste. The culture that is carried on, without any exception, on the arable lands, is only fallowing for rye; and, after two or three rounds, the land is so exhausted by this blessed system, that it is left to weeds: broom is the prevalent spontaneous growth in such a case; and if the broom be left for a number of years, it becomes a forest. This rye-course produces the landlord, for his half (as all is in the hands of metayers), about 2s. 6d. or 3s. an acre through the whole farm, by corn, cattle, &c.; and at such rates a vast proportion of the province is chiefly to be bought. Considering that the lands are all inclosed; that wood enough is every where found; that the country is furnished with a sufficient quantity of buildings; that the roads are excellent; that it enjoys a navigation to the capital; that markets are good, and prices high; that there is marl or clay under the sands and sandy gravels; that the climate is one of the finest in Europe; and the country highly pleasant and beautiful: when all these circumstances are well weighed, it will be admitted that no part of France is so eligible to establish a great and profitable improvement; but, as I must again repeat it, the whole province appears waste to the eyes of an English farmer.

AUVERGNE.—*Brioude.*—The mountains in this neighbourhood too much cultivated; the earth is, by such means, washed away by storms, and torrents drive away every thing.

VIVARAIS.—*Pradelles.*—Pare and burn old turf in these mountains. Great tracts burnt, exhausted, and left to nature to recruit.

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To Thuytz.—Cultivation is carried on in these mountains to an incredible height; and is all by hand. In some cases, earth is carried, by hand, in baskets, to form the terraced beds, that yield a difficult and scanty crop, that is brought away on the back. Nothing could possibly support such exertions, but the whole being small properties; every peasant cultivates his own land.

PROVENCE.—*Tour d'Aigues.*—The mountains here are all calcareous, yet they are, from a vicious culture and management, destroyed and abandoned, and yield subsistence to a few miserable goats and sheep only; such mountains in the Vivarais, the President remarks, are covered with superb chestnuts, that yield a good revenue;—this country would do equally well for them, as appears from the very fine ones found in the park of Tour d'Aigues. The cutting of every bush for burning the earth is the cause; this species of culture loosens the surface, and renders it a prey to torrents; so that all is washed into the rivers, and becomes the destruction of the plains. The Durance, in its whole course, of near 200 miles, has destroyed, on an average, to the breadth of half a league.

General Observations.

In the preceding notes, mention is often made of great tracts of country, so miserably cultivated, that the whole would, by a good English farmer, be considered as *waste*. This is particularly the case in Bretagne, Maine, Anjou, Sologne, Bourbonnois, &c.; and it is this circumstance which reduces the general average product of France to so low a pitch, as appears in the chapter which treats of it, notwithstanding the immense tract of twenty-eight millions of rich land, the products of which are, of course, very high. Here then ought to be the great effort of a new system of government in France. The revolution has cost immense sums; and has occasioned a happy defalcation of the revenue, provided it be replaced, wisely and equally, on some object of general consumption, *and not on land*; but the public burthens of the kingdom are so heavy (proportioned to its consumption and circulation), that every attention should be exerted to increase and improve the contributing income; and this can in no way, and by no methods, be effected so well and so easily, as by spreading improvements over these immense wastes, which are such a disgrace to the old government. The wastes alone are calculated, in these sheets, at 18,000,000 of English acres; if to these we add the tracts, in the above-mentioned provinces, which, though cultivated, are no more productive than wastes, and much of them not of equal profit, we cannot reckon for the whole less than 40,000,000 of acres that are in a waste state: not absolutely unproductive, but which would admit of being rendered four, five, six, and even ten times more so than they are at present. This extent is nearly equal to that

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of the kingdom of England; whence we may judge of the immense resources to be found in the improvement of the agriculture of France; and the wisdom of the measures of the National Assembly ought to be estimated in proportion to their exertions in this respect, rather than in any other. If they give a ready, immediate, and absolute right of inclosure; an exemption from all taxation whatever, for twenty-one years; and, by a wise system of imposts, the future prospect of not being too much burthened; if such be their encouragements, in addition to the great ones already effected, particularly in the abolition of tithes, they may expect to see, in a few years, great undertakings on these desolate tracts. But the policy of a good government will not, in this point, do the whole; it may encourage buildings, inclosures, manuring, and the investment of large capitals; but if these soils be attempted to be cultivated, as they have hitherto always been in France, failure, bankruptcy, and ruin, will be the consequence; and the lands, after a few years, left in a worse state than they are in at present. The government should therefore not omit taking the necessary steps, to have instructions well diffused for the cultivation of these immense tracts of country; not in the spirit of the old * system, by printing memoirs, which, if followed, probably would spread more mischief than benefit, but by the exhibition of a farm in each considerable district, under a right management, and in that degree of perfection of culture which is applicable to the practice of all mankind; of the poor farmers as well as of rich ones: every other species of perfection does well enough for gentlemen to commend, but is not adapted for farmers to imitate. One large farm, taken entirely from waste, in Bretagne, another in Anjou, a third in Sologne, a fourth in Bourbonnois, and a fifth in Guienne, would be sufficient. If these farms were cultivated on right

*. The edict, exempting new improvements from taxation, was in the right spirit. We are informed by Monf. Necker, that from 1766 to 1784, no less than 950,000 arpents were declared *défrichés*. *De L'Administ. des Fin.* 8vo. T. iii. p. 233. There can be no doubt but the greater part of these are long since abandoned again to nature. I never met with a single person in France who had half an idea of improving waste lands; and I may add, that, of all other practices in the agriculture of England, this is the least understood. See my *Observations on the present State of the Waste Lands*. 8vo. In regard to the excellent edict above-mentioned, there occurs a proof of the gross and consummate ignorance which one meets so often in France on all agricultural subjects. In the *Cahier du Tiers Etat de Troyes*, p. 38, they demand the abrogation of this edict, as prejudicial to the nourishment and multiplication of cattle. Even the nobility of *Cambray*, *Cahier*, p. 19, are against cultivating commons. The nobility of *Pont-à-Mousson*, *Cahier*, p. 38, declare, that the encouragement of inclosures and *défrichemens*, is prejudicial to agriculture; shame on their folly! The clergy are wiser; for they demand that the possessors of wastes shall either cultivate them themselves, or let others that are willing, on reasonable terms. *Cahier de Melun & Moret*, p. 22; and that all commons shall be alienable for the prosperity of agriculture. *Bayonne*, Art. 51. And some of the *Tiers Etat* also; all commons to be divided. *Cotentin MS.* And new *défrichemens* to be exempted from all taxes for twenty years. *Nîmes*, p. 19. *La Rochelle*, Art. 17, *MS.*

practical principles, on those of utterly disregarding corn till the ample support of sheep and cattle (but particularly the former) in winter, by means of green crops, and in summer by grasses, gave such a command and facility of action, that whatever corn was then sown, would, in its produce, be worthy of the soil and climate of France, yielding ten for one on these wastes, instead of five or six for one, the present average of cultivated lands in that kingdom. If this were done, I say, the profit of *such* improvements would be equally great and durable; the practice exhibited would take deep root in the respective provinces; and extensive and speedy improvements would be the consequence. By such a policy, the National Assembly would prove themselves genuine patriots; the kingdom would flourish; population, which, at present, is a burthen, would be rendered useful, because happy; and the consumption and circulation of these provinces increasing, would give a spur to those of the whole society; the weight of taxes would lessen, as the basis enlarged that supported it:—in a word, every good effect would flow from such undertakings, if properly executed, that can add to the mass of national prosperity; and consequently the most worthy of the attention of an enlightened legislature*.

Attempts have been made to improve these wastes, but always with ill success; I saw a neglected farm gone back nearly to its pristine state, not far from Nantes; the Marquis of Turbilly's, in Anjou, had no better success; and equal failures attended those that were tried on the heaths of Bourdeaux; and I heard of some others, similar undertakings, in different parts of the kingdom; but, in general, they were all equally unsuccessful; and no wonder, for all were conducted on the same plan, with no other object in view than corn; but this is the least important of the products, as it hath been above observed, that should be found on new improvements. A French writer†, who speaks from experience, as well as the Marquis of Turbilly, prescribes this course;—1, dig, at the expence of 20 liv. per arpent, of 46,000 feet, in winter, and summer-fallow, with many ploughings and harrowings, for—2, wheat;—3, oats;—4, fallow;—5,

* At present (August 1793) we know what the blood-hound government of France have done for agriculture: COMPLETELY ruined all that was good in it.

† *Experiences and Observations sur les Défrichemens.* Par Mons. le Doffeur. Lamballe. 1775. 4to. P. 26, 28, 33. This gentleman tells us, that paring and burning should be practised only on a calcareous soil, for in Bretagne the peasants get but two or three crops of corn by it; and if more, much dung is requisite. But if they can have two crops of corn, cannot they have one crop of turnips? Cannot they have GRASS, which seems never to be in his contemplation, though almost the only thing that ought to be in view. De Serres knew better; he recommends paring and burning, describes the operation, and answers the objection of those who urged a short continuance of the profit, by shewing, that such cases proceed from improper management, and do not occur, if the laws of good tillage be pursued, *au cultiver & au reposer.* Le Théâtre D'Agriculture, par D'Olivier de Serres. 4to. 1629. P. 64 to 70.

wheat;

wheat;—6, oats, &c. &c. This gentleman, who tells us he broke up and *improved* 450 arpents, has not explained how *real* improvement is to be made without sheep or cattle. Where is his winter food in this preposterous course? If these 450 arpents be really improved, they have cost him five times more than they are worth; but I suspect they are—improved *a la Turbilly*. It is mere romance to think of improving wastes profitably without a great flock of sheep. The ideas of French improvers seem rooted in a contrary spirit; to the present moment, there is no other plan than the old one of corn. A publication of the year 1791, *Memoire sur l'Utilité du Défrichement des Terres de Castelnaud-de-Medoc*, speaks of the same methods—*déraciner—labourer—herfer—ensemencer—froment—seigle*, p. 5. The same views in every part of the kingdom; but when you inquire for cattle, you have, on some hundreds of acres, seven cows, three mares, four oxen, and no sheep! (P. 4.)

As the subject is one of the most essential in French agriculture, I will very briefly sketch the right principles on which alone waste countries can be improved to profit. The rapid view which is practicable for a traveller to take, will allow no more than an outline; fully to explain the process would demand a distinct treatise.—1, The buildings, upon which so much money is generally so uselessly employed, should, in a private undertaking, be adapted to that sized farm, which lets in the country most advantageously; but, in a public undertaking, they should be adapted to that sized farm which is most favourable to a beneficial cultivation of the soil; in the latter case from 400 to 600 acres. This attention to the scale of the buildings flows from the plan of the improvement, which is that of letting the land in farms, as fast as it is well improved, and brought into the cultivation in which it ought afterwards to remain. But whatever the size of the future farms may be, the strictest attention ought to be had to keeping this part of the expenditure as low as possible; it contributes little to the productiveness of the land, except what arises from convenient offices for cattle and sheep.—2, The next object is to buy a large flock of sheep, to feed on the lands in their waste state, that are to be improved; five hundred would be a proper number to begin with. These sheep should be, as nearly as possible, such as the South Downs of England; of the French breeds, the most profitable, and the best to procure, would be those of Roussillon. It is of more consequence to have a breed not too large, and well clothed with a short firm fleece, than larger or more expensive breeds.—3, The first summer should be entirely employed in paring and burning, and cultivating, at least, 100 acres of turnips and rape, for the winter support of the sheep and plough-oxen. After the turnip season is past, the paring and burning to continue for rye, artificial grasses to be sown with the rye.—4, Begin, as early in the spring as possible, to pare and burn fresh waste, first for a crop of potatoes, on fifteen

or twenty acres, and then for 200 acres of turnips. The turnip land of last year to be sown with oats, on three ploughings; and with the oats, over fifty acres, clover-feed to be sown. After the turnip season is past, continue paring and burning for rye, as before. The labourers employed in the summer on paring and burning, to work in the winter on ditching, for forming inclosures; the banks to be planted with white thorn, and willows for making hurdles.— This is sufficient to state the leading principles of the undertaking. Oeconomy in the execution demands that the labourers employed should have work constantly; in summer paring and burning, and managing the hay and corn harvest; and in winter ditching; quarrying, if there be lime-stone on the premises, for burning lime for manure; and, if not, digging and filling marl, or chalk, or other manures which may be found under the surface. In like manner the number of masons and carpenters should be so regulated, in proportion to the works, so as to find constant employment through the building season.

The courses of crops will explain the whole business of tillage. On the land pared and burnt, and planted with potatoes in the spring, the following rotation: 1, potatoes;—2, oats;—3, turnips;—4, oats, and grass seeds for laying down.

On the land pared and burnt, and sown with turnips at midsummer:—1, turnips;—2, oats;—3, turnips;—4, oats, or barley, and grass seeds for laying down.

On the land pared and burnt, and sown with rye in autumn:—1, rye;—2, turnips;—3, oats;—4, turnips;—5, oats, and grass seeds for laying down.

All the turnips to be fed on the land with sheep, by hurdling, except the small quantity that would be wanted for the plough oxen.

All the grasses to be mown the first year for hay, and then pastured by sheep, for two, three, four, or more years, according to circumstances. When they wear out, or betray indications of a want of renewal, they may be broken up with a certainty of yielding grain in plenty; but no two crops of white corn ever to be sown in succession: by white corn is understood wheat, rye, barley, and oats.

A very easy, and, in some cases, effectual method of improving heaths, is by grubbing up the plants that grow spontaneously, and spreading lime upon the waste without any tillage, sowing grass seeds and covering them by the sheepfold: it is surprising what a change is thus effected at the smallest possible expence; soils, apparently miserable, have been made at once worth the rent of 20s. per acre.

It is not possible to give more than an outline in such a sketch as this; variations, arising from a difference of soil, will occur; which, though not considerable, must be marked with care, or useless expences will often be incurred. The method just hinted at is particularly applicable upon those wastes, which

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are, in culture, steril, from abounding with the vitriolic acid; the case of many in Bretagne; where pudding stone is found in some districts at six to eight inches under the surface: cultivation on such, by the plough, may be so tedious and expensive, that the mere paring and burning, and application of a calcareous manure, lime or marl, with grass seeds, and told, as above-mentioned, would be much the best improvement, as I have myself experienced, in a country more vitriolic and steril than any wastes I saw in Bretagne.

The progress of the flock of sheep will, by its procreation, shew what may be the given progress of such an improvement, providing turnips, in the proportion of one acre to five sheep, which will allow enough for oxen and other cattle, and supposing the losses upon a flock to be 5 per cent.

If the breed of sheep be good, all the ewes should be saved, for increasing stock, and the wethers should be kept until two years old and past, sold fat at from two to three years. On such a plan, a flock increases rapidly, perhaps more so than the capital employed. But the conductor of such an undertaking would of course proportion his flock to his money, so that all the works might be constantly going on, without stop or break; to effect which, would demand no inconsiderable foresight and knowledge of the business.

By the plan of letting the lands, as soon as brought into complete cultivation, the capital employed in the undertaking would be exerted to the utmost force and advantage, in spreading the improvement over the greatest possible breadth of waste. If the lands were all to be kept accumulating into one farm, it would grow too vast to be managed with profit; but, by letting, the principal attention, exertion, and force of capital would be always employed where most wanted and most useful; and it is hardly to be believed, by those not accustomed to such observations and inquiries, how great a tract of country might, in twenty years, be improved.

Planting colonies of foreigners upon wastes, has been a favourite method pursued in several countries, particularly in Spain and in Russia; such speculations have rarely answered the immense expences bestowed upon them. The lands are usually but half improved; the husbandry introduced is almost sure to be bad; and the jealousy, with which the new settlers are viewed by the natives, prevents their practice from ever being imitated. Such a mode of improvement, as is here sketched, would be infinitely more beneficial; what was done would be well done; all would be executed by natives; for the only foreigner employed in the business should be the director. There would be no probability of the improvement not being durable and spreading widely; for the lands not being let until the cultivation was completely in train, the profit as well as the method would be seen by every one.

By

By executing the improvement of a waste on these principles, ten thousand pounds would have an infinitely greater effect than an hundred thousand expended in any other method: in the German colonies, established in the Siera Morena in Spain, and in various others in different parts of Europe, much attention has been paid to the establishing of little farms only. I do not want to view such, to know that the improvement is beggarly, and the husbandry contemptible: no waste can be really improved, and to the best advantage, but by means of the sheep, powerfully applied; all other methods are costly, slow, and of weak effect; but no little farmer can have a flock sufficient. This paltry idea of establishing nothing but little farms, is the result of most impolitical ideas respecting population, which ought never to be the object of a moment's attention. If it exist idle, or beyond the proportion of employment, it is the source of poverty and wretchedness; it is valuable only in proportion to regular and active employment; find that employment, and you will have an industrious active population in spite of every obstacle. But small farms and little divisible properties, increasing the people, without increasing employment, has no other tendency than to propagate idle beggars, and to disseminate modes of husbandry, calculated to exhaust the land, and keep its cultivators in misery. This is not theory but fact, of which almost every province, in France, abounds with glaring instances. But of this more in another chapter.

There is another sort of waste land, that abounds also very much in France, I mean marshes: it is asserted, that there are from 1,200,000 to 1,500,000 * arpents of them in France. The improvement of these is vastly more expensive and more difficult than that of *landes*, heaths, moors, &c. The drains demanded for them require a considerable capital. These ought to be converted to meadow and rich pasture, by means of draining. Where they admit it, the cheapest improvement of such is by irrigation; the general drainage of great marshes, if not trusted by the assemblies of the departments to the conduct of some one able director, should be done by commission; by constituting a company, as in England, and paying the expence, by a tax on the lands drained. If the rage for small farms continue, these marshes, in proportion as the soil is boggy, will admit of being divided into small portions, that is, of 30 to 60 arpents, but it should be under an absolute prohibition of the plough. The bog, which I saw in passing from Auvergnac to Nantes, and which seems, from its appearance on the map of Bretagne, to be of a vast extent, is highly susceptible of improvement, and every acre of it might be converted into rich meadow.

* *Rapport du Comité d'Agriculture, &c.* 7 Fev. 1790, par M. de Lamerville, député de Berri. P. 3.
De la nécessité d'occuper tous les gros Ouvriers, 1789, par M. Boncerf. P. 3.

CHAP. XV.

Of Coals, in France.

LIMOUSIN.—*Limoges*.—I WAS here assured, that a vein of coal has been found at the depth only of 12 yards, which is 17 feet thick; but it is no where used, either in houses or in manufactures; the iron forges are all worked with charcoal. If this is fact, what a want of capital it proves!

FLANDERS.—*Valenciennes*.—There are mines worked here. The manco of 240 lb. sells for 23*s*. 9 den. and the worst of all at 12½*s*.; the largest of all at 35*s*. and 36*s*.; they are more abundant at Mons. Wood is burnt here at the inns, and all the better private houses, but the poor burn coal: the mines, they say, are 700 feet deep; the coal is drawn up by four horses; they have four steam engines.

Lille.—Coals, the raziere, 3 liv.

Dunkirk.—English, the raziere of 300 lb. 8 liv. These are burnt in every house in the town, and are one-third cheaper than wood: there is a canal to the coal pits at Valenciennes, but the distance too great, and locks too numerous and expensive to rival the import from England.

Bethune.—Pits within a few leagues. Price here 44*s*. to 46*s*. the raziere, which, I have been told, holds about nine English pecks; but the raziere of St. Omers holds 195 lb. of wheat.

Rouen.—The boisseau of 22 pots, each 2 bottles, 3 liv. 10*s*.

Isigny.—A mine newly opened, at which the coals sell at 14*s*. 1 liard, the boisseau, of 90 lb. to 100 lb.

Carentan.—Coals of the country only for blacksmiths, 14*s*. the boisseau of 80 lb. dry at the mine, but wet are 90 lb. or 100 lb.: they are not half so good as what is brought from England.

Cherbourg.—In the manufacture of blown plate glass, a great quantity of Newcastle coal is burnt; 13 keel, or 103 chaldrons, cost, all English charges included, about 7500 liv.; the French duty 3600 liv.; and port charges, &c. make it in all about 11,000 liv. which being near 5*l*. a chaldron, seems an enormous price, at which to buy fuel for a manufacture. The coals of the Cotentin, they say here, are good for nothing.

Granville.—The blacksmiths burn *Guernsey* coals.

Auray.—English coals 3 liv. the boisseau of about three English pecks, which the blacksmiths use for particular purposes.

Nantes.

Nantes.—French coal 300 liv. the 21 barriques, each double wine measure, or 480 pints, but one barrique of English is worth two of it.

A coal mine worked by a *Monf. Jarry*, at *Langien*, five leagues from *Nantes*. Another at *Montrelais*, near *Ingrande*; and at *St. George*, near *Saumur*. The French coals used in the foundry, near this city, come to 34 liv. the 2000 lb.

La Fleche.—Price 16*s.* the *boisseau*, of 30 lb. wheat; they are from *Angers*.

Rouen.—*Monf. Scannegatty* works the common borer, with a windlass, in boring deep for coals, for which purpose he has been employed by government: he shewed me the model of one made at *Paris*, 300 feet long; with this he has bored 160 feet, much of it in hard rock, without accident; his objection to shafts, is the water rising; he would use shafts until he comes to water, but after that must bore. He says, the badness of the coal, in the mine near *Cherbourg*, arises merely from being ill worked; they have got at present only to the surface coal, instead of piercing through the bed. *M. Scannegatty* asserts, the consumption of English coals, in the generality of *Rouen*, to be two millions a year. The price is 40 liv. for 6½ barriques, each barrique 150 lb. or 975 lb. or about 80 liv. a ton.

Elbæuf.—Consumes 200,000 liv. a year in English coals.

Nangis.—Brought from *Berri*. Price 4 liv. the English bushel.

LORRAINE.—*Pont-à-Mousson.*—From *Sarbruck* 18 liv. the 1000 lb. At the mine 5 liv.

ALSACE.—*Befort.*—Price at the mine, four leagues from this place, 12*s.* the 100 lb.; here 16*s.* They are used only by blacksmiths.

BOURGOGNE.—*Chagny.*—Coals from *Mont Cenis*; at the mine 6 liv. the wine *queu*; here 10 liv. Nobody burns coals in their houses.

Mont Cenis.—At the mine a *ban* 10*s.* It is remarkable, that at the inn here, and at every house, except those of the common workman, wood is burnt; which shews the absurd prejudices of the French, in favour of that fuel, in spite of price.

BOURBONNOIS.—*Moulins.*—Price 30*s.* the *bachole*, of which 4 make a *poinçon*.

AUVERGNE.—*Clermont.*—Price 10 liv. the *raze* of 2 feet 2 inches, by 1 foot 6 inches, and nine inches deep. Used only in stoves, or by blacksmiths; they are from *Brioude*.

Brioude.—The *raze*, of 150 lb. 16*s.*; but the best is 20*s.*

Fix.—The *carton*, of 50 lb. 14*s.*

VIVARAIS.—*Costeros.*—The quintal 50*s.*

Thuytz.—The blacksmiths here burn charcoal, yet are near the coal mine, which I passed in the vale; it is a stone coal; the price 7*s.* the 100 lb.

DAUPHINE.

DAUPHINE.—*Montélimart*.—Large coal 1 liv. 15*s*. the 155 lb.; small, for blacksmiths and manufacturers, 22*s*. the 155 lb. The mine is at Givors, near Vienne, at five leagues from Lyon; there is a canal to Vienne, but with a toll. Coak, made of coal, for melting, 5*s*. the quintal.

Pierre-Latte.—Coals 3 liv. the measure of about 6 pecks; none used but by blacksmiths.

PROVENCE.—*Tour d'Aigues*.—Price 40*s*. the quintal. 16*s*. or 18*s*. at Aix. At the mine, three leagues from Aix, 5*s*.

Marseille.—Coals from Givors, in Dauphiné, near Lyon, 33*s*. for 210 lb. of Faveau, in Provence, 40*s*. to 42*s*. for 300 lb. Of Valdonne, 41*s*. ditto: used in the soap fabric and sugar refineries. Of England 42*s*. to 45*s*. on board the ship, for 210 lb.; on shore 60*s*. for 195 lb.

LYONNOIS.—*Lyon*.—Coals 30*s*. the 130 lb. The mines are six leagues off; price there 24*s*. for 160 lb.: there is a canal from the pits to the Rhone.

The want of vigour in working the coal-mines in France, is to be attributed to two causes; 1, the price of wood has not risen sufficiently to force this branch of industry; and, 2, the want of capital, which affects every thing in that kingdom, prevents exertions being made with the necessary animation. But these evils will correct themselves; the gradual rise in the price of wood, which, so far from being an evil, as it is universally thought in France, is only a proof of national improvement, will by degrees force the consumption of coals; and when these are in the necessary demand, they will be produced in greater quantities.

CHAP. XVI.

Woods, Forests, Timber, and Planting, in France.

Pyrennees—A Considerable proportion of these mountains is under wood, and a much larger has been; for the destruction of them making every day, is not credible to those who have not viewed them. Passed frequently through several woods near Bagnere de Luchon, in which the wood-men were at work, riving and cutting beech staves for casks; I was shocked to see the destruction they made, which could not have been more wasteful or lavish if they had been in the midst of an American forest. Large and beautiful beeches are cut off, 3, 4, and 5 feet high, and those noble stumps left to rot; whole trees, which, on trial, would not rive well, left for years, and now rotting untouched; and in working those we saw, nothing but clean cuts taken, 3 or 4 feet perhaps in 50, and the rest left on the ground in the same confusion in which it fell. The destruction so general in this noble forest of Lartigues, that it is almost destroyed; there is no young growth for succession; and in ten or twelve years it will be a bare mountain, with a few miserable shrubs browsed by goats and other cattle. In some tracts which I passed, at a few leagues distance, towards the walks of the Spanish flocks, there are some forests destroyed in such a shameful manner, that to a person, from a country where wood is of any value, must appear incredible; several scores of acres so utterly destroyed that not a tree remains standing; yet the whole a forest of stumps, 3, 4, and 6 feet high, melancholy and shocking to behold. The torrents every where roll down as much wood as stone, and present a spectacle of similar ruin; the roads are formed of fragments of trees, and are guarded against the precipices by whole ones laid and left to rot; you no where pass many yards without thrusting your cane into bodies, rotten, or rotting; all is ruin, waste, and desolation; and the very appearance one would suppose a wood to carry, in which a foreign enemy had, with the most wanton malice, destroyed every thing.

These woods are commons belonging to the communities of the parishes, upon which every inhabitant assumes the right, and practises the rage of depredation. So careless of the interests of posterity, or rather so inflamed against every idea but that of the present moment, that, in the general opinion, there will be an undoubted scarcity in thirty years, amidst what have been, and yet are, in some districts, very noble forests. The communities sometimes sell woods; an instance occurred lately, that of Bagnere de Luchon sold a *fall* for 14,000 liv. but worth, it is said, 35,000 liv. in which some pilfering might take place; this

was

was to pay their share of the new bathing house. Is it possible that such a recital can be given of a country that imports pot-ash from the distance of 2000 miles!

The number of saw mills, in these mountains, turned by torrents, is considerable; they are of a very cheap and simple construction, but exceedingly incomplete, having no mechanical contrivance for bringing the tree to the saw, a man constantly doing it by pressing with his foot on the cogged wheel.

LANGUEDOC.—*Lunel*.—At the Palais Royal inn there is one, among many stables, which is covered by twelve large beams, 16 or 18 inches square, and 45 feet long. The whole country is at present *quasi* such trees as these, denuded.

GASCOGNE.—*St. Palais to Anspan*.—An oak here sells for 30 liv. which would, in England, sell for 45s. to 50s.

ISLE OF FRANCE.—*Lieur saint*.—In the royal forest of Senars, the oak copses are cut every twenty years, and sell at 600 liv. the arpent (the cord of wood selling, at Paris, at 50 liv.), which makes 30 liv. a year, but from this carriage is to be deducted, and there will remain about a louis d'or.

Liancourt.—Woods here form a considerable portion of the whole country. They are in general cut at twelve years growth, but in some parts at fifteen and twenty; they sell at twelve years from 100 liv. to 200 liv. the arpent (about $1\frac{1}{4}$ acre): at 150 liv. it may be called 12 liv. per annum; as they are on the poorest land this is much more considerable than the same land would let for, but it is much inferior to what the *product* of the same lands would be, under a tolerable system of cultivation. The quantity of forest spread over the country, in almost every direction, makes timber cheap: oak, ash, and elm sell at 30s. the cubical foot, a larger foot than that of England. The poorest family 60 liv. a year in wood.

Clermont.—Near this place, in the forest of la Neuville eu Haye, belonging to the king, there is an undertaking now (1787) going forward, which does honour to government: it is a plantation of oak for timber. The land is inclosed with pales, wired to the rails, in the French manner, instead of nailing: the land is all trenched 2 feet deep, for which the workmen are paid according to the soil, 20s. to 40s. the square perch of 22 feet, and they earn about 22s. a day: as it was an old forest where they work, there are many roots, for extracting which they are allowed something more. The soil in general is a good light loam, except in some parts, on a pure white sand. The whole expence, by contract (fencing excepted), digging, planting, filling vacancies, and hoeing twice a year, for five years, is 300 liv. the arpent, of about $1\frac{1}{4}$ acre. The fence is 3 liv. the toise, or about 1s. 2d. a yard, running measure: 60 arpents are done, and they are still at work. I viewed the oaks with pleasure; they are

most of them remarkably fine; they thrive well, and are very healthy; some are five years old from the seed, and others five years old from transplanting; the plants then three years old: these are the largest, but not more so than three years difference in age ought to make them: they are in rows at about 4 feet. There is also a small inclosure of chestnuts and Bourdeaux pines (*pinus maritimus*), sown four years past, which are now five feet high, which is a vast growth. The only enemy which the oaks have hitherto met with, is the cock-chaffer grub, which has killed some.

Dugny.—Mons. Cretté de Paluel has planted many thousands of the poplar, with success, and has cut them when only twelve years old, large enough for building. Several of his farming offices, very well and substantially built, are of this wood, erected twelve years ago: and the timbers are now as sound as at the time of using; but he has found, that when exposed to the weather, it does not last.

NORMANDIE.—Bon.—The feat of the Marquis de Turgot, elder brother of the celebrated controleur-general. A large plantation of foreign trees, in which nothing is so remarkable as the superiority of the larch to every other plant.

Falaïse.—Woods, at twelve years growth, pay 8 to 10 louis an acre, or 22 liv. a year.

Harcourt.—The larch and Weymouth pine, of eighteen years growth, have thriven beyond any thing. I measured a larch, of that age, 3 feet 6 inches in circumference, at 5 feet from the ground; and a Weymouth 2 inches larger. Woods throughout Normandie, on an average, pay 20 liv. the Norman acre (10s. 6d. per English acre).

La Roche-Guyon.—There is nothing in this country that pays better than plantations of willows for yielding vine props. The Dutchess D'Enville has a piece of $3\frac{1}{2}$ arpents, which yields 400 liv. a year, by being cut every third year. New ones are set as the old wear out; the heads are cropped at three years old, and the great product is from nine to eighteen years of age. Lombardy poplars, planted by the present Dutchess, of twenty-four years growth, are worth 11 liv. each, standing only 6 feet asunder: it would be useless to apply calculation to this fact, to see what the acreable produce would be; for if a man had a few acres to sell every year, he would be able to get no more than the price of a very bad fire wood, not saleable till after every better sort in a country was consumed. Could a demand be found, the profit would be enormous. They grow on the level of the Seine. They are cut into boards 10 inches wide, which sell at 2s. the foot.

ISLE OF FRANCE.—Columiers.—Woods, at nine years growth, worth 180 liv. the arpent (9l. the English acre).

CHAMPAGNE.

CHAMPAGNE.—*Mareuil*.—At twenty years growth, worth 300 liv. the arpent (10l. 10s. per English acre), at $1\frac{1}{2}$ or 2 leagues from the Marne, but if further, 4 liv. per arpent per annum deduction.

Epernay.—It is possible to go from hence to Alsace, with no great interruption, through forest, all the way.

LORRAINE.—*Braban*.—Woods are cut, at twenty years growth, and the produce 12 liv. per arpent per annum (18s. 4d. per English acre).

Metz.—Woods cut, at twenty to twenty-five years growth, 120 liv. the journal.

Luneville.—Woods cut, at twenty-five or thirty years growth, from 40 liv. to 100 liv. net the journal, 1974 English yards.

FRANCHE COMTE.—*Besançon*.—Cut, at twenty-five years growth, and yields 150 liv. to 200 liv. the cutting, or 8 liv. per annum per arpent; near the forges of the city, to 300 liv. (10l. 10s. per English acre).

Orchamps.—A little auberge consumes from twenty to thirty waggon loads, each 8 liv. in a year, at one fire.

BOURGOGNE.—*Auxonne*.—Pais a wood felled and corded, 12 cords per English acre; the cord 8 feet by 4 feet, and two high; and the price 8 liv. A little aubergiste consumes to the amount of 200 liv. a year, one fire. It would cost a poor family 80 liv. a year, if they bought fairly all they burn. Calculate

Four millions of families, at one cord, and at ten per acre, 400,000 acres.

Cut, at twenty years,	8,000,000
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At two cords,	16,000,000
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At three ditto	24,000,000
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Dijon.—Consumption of one fire, 5 or 6 *mæul* for the poor, the *mæul* 4 feet cubical. Of the whole town, of 24,000 people, 40,000 *mæul*. Best oak timber, 3 liv. the cubical foot. Inferior to 20s. Elm dearer than oak; used for wheel carriages only. Pine one-third cheaper.

BOURBONNOIS.—*Moulins*.—Copses cut, at fifteen years growth, and sell at 50 liv. the arpent, of 48,384 feet; no expence except cutting. Oak timber, 18s. to 20s. the cubical foot. Planks of 9, 10, and 11 inches wide, 45 liv. to 60 liv. the hundred toise (6 feet), $\frac{5}{8}$ inch thick. Laths 14s. the faggot, of 52, and 5 feet long.

AUVERGNE.—*Riom*.—One fire, and a very poor one, 80 liv. if bought.

Clermont.—A poor family, to steal none, must have ten cord, or 60 liv. and charcoal to the amount of 15 liv.; but, in general, they steal, or collect as well as they can.

VIVARAIS.—*Pradelles to Thuytz*.—Great woods of pines in these mountains, with saw-mills for cutting them.

DAUPHINE.—*Loriol*.—Oak 12s. the 100 lb.

PROVENCE.

PROVENCE.—*Tour d'Aigues*.—Wood thrives greatly in this country. The President has a great many oaks, and some of a vast size; also black poplar and beech. One by the farm-house, 13 feet 11 inches, French, in circumference, at 5 feet from the ground, and 80 feet high. Here also are evergreen oaks, 500 years old. He has *platanus* of a vast growth, in twenty-five years, and the *morus papyrifera*, of a great size. The poorest family in this country consumes 60 quintals of wood a year, stolen, or bought; generally the former. A bourgeoisie, that has soup every day at one fire, 150 quintals.

Fréjus to Estrelles.—The pines, &c. in these mountains, hacked, plundered, and destroyed, almost as wantonly as in the Pyrennees: and spots every where burnt by the shepherds, though prohibited, in order to produce herbage for their flocks.

Price of Wood and Charcoal, &c.

Price per
Paris load
of 140 ft.
liv.

1787.—LIMOUSIN.—*Limoges*.—Charcoal 30*s*. the quintal.

ANGOUMOIS.—*Verteuil*.—Cord of wood 10 liv. near a navigation; 3 liv. at a distance.

ISLE OF FRANCE.—*Montgeron*.—Cord 44 liv.

FLANDERS.—*Lille*.—Ditto 60 liv.

Dunkirk.—Ditto 60 liv. the load of 100 measures.

1788.—NORMANDY.—*Caen*.—Charcoal 20*s*. the raziere, of 40 lb. of wheat.

Cord of beech wood, 6 feet long, 4 broad, and 4 high, 24 liv. 35

Other woods 18 liv. to 20 liv. 27

Faggots of $3\frac{1}{2}$ feet around, and 5 feet long, with large wood in them, 60 liv. to 80 liv. per hundred.

BRETAGNE.—*Rennes*.—Cord 8 feet long, 4 high, and $2\frac{1}{2}$ broad, 15 liv. to 17 liv. 28

Landerneau.—Cord 8 feet by 4 feet, and $2\frac{1}{2}$ high, 24 liv. 42

L'Orient.—Cord 8 feet by four feet, and $2\frac{1}{2}$ high, 20 liv. 35

Auray.—Charcoal 3 liv. the barrique. Iron 5*s*. the lb. A horse-shoe 12*s*.

Auvergnac.—Cord of wood, 28 liv. 49

Nantes.—Ditto 30 liv. to 36 liv. 57

Swedish iron 280 liv. the thousand pound. Hemp 50 liv. the hundred ditto.

Ancenis.—Cord 24 liv. 42

ANJOU.—*Angers*.—Cord 8 feet long, 4 feet high, and 4 broad: a double cord, 40 liv. 42

Faggots 18 liv. to 24 liv. the hundred.

La Fleche.—Cord 16 liv to 21 liv. 39

Charcoal 70 liv. to 80 liv. the 42 barriques.

MAINE.

Price per
Paris load
of 140 ft.

MAINE.— <i>Guescelard</i> .—The cord, 6 feet by $3\frac{1}{2}$ feet, and $3\frac{1}{2}$ high, of	liv.
pine, 6 liv.	12
Ditto of oak, 14 liv.	26
NORMANDY.— <i>Gacé</i> .—Charcoal 52 <i>s</i> . the barrique. Iron 23 liv. the	
hundred pound, or 1 liard less than 5 <i>s</i> . the lb. They charge 8 <i>s</i> . the lb.	
for heavy work, and 32 <i>s</i> . for shoeing a horse.	
<i>Elbæuf</i> .—The cord 8 feet by 4 feet, and $2\frac{1}{2}$ high, 24 liv.	42
<i>La Roche-Guyon</i> .—Cord 8 feet by 4 feet, and 4 high, is 30 liv.	32
ISLE OF FRANCE.— <i>Nangis</i> .—Cord 12 feet by 4 feet, and 4 high : price	
24 liv. to 28 liv.	18
CHAMPAGNE.— <i>Mareuil</i> .—Cord 8 feet long, 5 feet high, and 3 feet	
7 inches broad, fells, oak 36 liv.	31
White woods 24 liv.	21
Charcoal 50 <i>s</i> . the tonneaux, of 200 pints of Paris (quarts).	
<i>Epernay</i> .—The cord 40 liv.	40
<i>St. Meneboud</i> .—Cord 8 feet by 4 feet, and $3\frac{1}{2}$ inches : 18 liv. 10 <i>s</i> . ; in	
the town 19 liv. ; but twenty-five years ago it was 7 liv. 10 feet.	24
LORRAINE.— <i>Braban</i> .—Cord 8 feet by 4 feet, and 4 high, is 19 liv.	20
<i>Mar-le-Tour</i> .—Cord 8 feet by 4 feet, and 4 high, is 16 liv. ; the best	
21 liv.	20
<i>Metz</i> .—Charcoal 30 <i>s</i> . the sack : cord 8 feet by 4 feet, and 4 high ; is	
32 liv. : of beach and hornbeam,	35
Of oak, 22 liv.	24
<i>Pont-à-Mousson</i> .—Cord 8 feet by 4 feet, and 4 high : in town 16 liv. 10 <i>s</i> .	18
In the forest 12 liv.	
<i>Nancy</i> .—Cord floated oak 20 liv. ; other sorts 23 liv.	28
Not floated oak 26 liv. ; beech and hornbeam 34 liv.	37
<i>Luneville</i> .—Cord 8 feet by 4 feet, and 4 high : now 24 liv. to 28 liv.	
Beech,	28
Oak 22 liv. to 23 liv.	24
ALSACE.— <i>Straßbourg</i> .—Cord 6 feet by 6 feet, and 3 high ; price 27 liv.	
<i>Schelestat</i> .—Cord 6 feet by 6 feet, and 3 high ; price 24 liv.*	31
<i>Isle</i> .—Cord 8 feet by 4 feet, and 4 high ; price 12 liv. yet many iron	
forges,	14
FRANCHE COMTE.— <i>Besançon</i> .—Cord 8 feet by 4 feet, and 4 high,	
floated, 16 liv. 10 <i>s</i> .	18
Not floated, 25 liv.	27

* Some sold 6 feet by 6 feet, and 6 high.

Orchamps.

Price per
Paris load
of 140 ft.

Orchamps.—Iron; all used by blacksmiths; is of the country; 5*f*. the lb. Charcoal only used in making it, at 40 liv. the load of four horses, about 50 or 60 bushels; there are forges spread over the whole country: one within three leagues, which, with its furnace, uses 50 loads of wood per diem. Shoeing a horse 40*f*.

Dijon.—Cord $7\frac{1}{2}$ feet by 4 feet, and $4\frac{1}{2}$ high, at 26 liv. the mœul, a cube of 4 feet, and the price 13 liv. - - - - - 26
Price of carriage 20*f*. per thousand pound for each league.

Chagny.—Mœul, cube of 4 feet, 13 liv. to 16 liv. - - - - - 31
Iron: tier of wheels 7*f*. the lb. and 8*f*. for the nails. Price of iron 5*f*. 1 liard.

Moulins.—Cord, 2 to a coche, 30 liv. Charcoal 3*f*. to $3\frac{1}{2}$ *f*. the English peck. Iron 1 liard under 5*f*. per lb. Cast ditto 3*f*.

Clermont.—Cord 3 feet 11 inches, by 7 feet 4 inches circumference; price 6 liv. about one-fourth of a Paris cord, - - - - - 24
Charcoal 2*f*. the lb.

Fix.—Iron $5\frac{1}{2}$ *f*. the lb.

Montélimart. Charcoal 5*f*. the hundred pound.

Pierre Latte.—Wood 20*f*. the hundred pound.

Avignon.—Wood 18*f*. to 20*f*. the hundred pound. Charcoal 3 liv. the hundred pound.

Tour d'Aigues.—Charcoal 45*f*. the hundred pound.

Marseille.—Wood 3 liv. 17*f*. for 300 lb. and 8*f*. carriage from the ship. In winter the same, 5 liv. Charcoal, by shipping, 50*f*. the quintal, 120 lb.; by land 70*f*.

Lyon.—Oak, the mœul, 3 feet 8 inches square, 23 liv.

General average, - - - - - 30

To these data may be here added, that the woods and forests of the kingdom amount to 19,850,515 acres, and that the average annual produce may be reckoned 14*s*. an acre. It here appears, that the average price per cord, of 140 cubical feet, is 30 liv.

The price of wood has risen considerably in France.—Price of the lignier, equal to two Paris voies, at Bourg, in Bresse.

In 1688,	-	-	3 liv.	0 <i>f</i> .
1718,	-	-	3	12
1748,	-	-	7	10
1778,	-	-	9	0
1789,	-	-	21	0*

* *Observations sur l'Agriculture*, par Ma. Varénne de Fenille, 8vo. p. 141.

The scarcity of wood in France, as marked in this rise of price, has occupied at least an hundred pens during the last ten years: almost all the cahiers complain heavily of it, and in that of the clergy of Meaux, they call it a real calamity. There is hardly a society of agriculture, in the kingdom, that has not offered premiums for memoirs that should explain the causes of such an alarming want, and point out the best means of remedying it. The opinion is universal; I have met but one mind upon the topic, which, considering the talents for political œconomy, surprised me a good deal; for I must declare myself of a directly contrary opinion, and venture to assert, that the price of wood is too low in France; that it has not risen so rapidly as it ought to have done; and that all ideas of encouraging plantations, to prevent a further rise, are ignorant and mischievous, and founded in a total misconception of the subject, for want of combining those circumstances which bear upon the question. The rent of arable land, in France, calculated separately, and rejecting the parts left waste, and in neglect, is 15s. 7d. an acre; but the rent of woods is only 12s. How then in common sense can any one complain of a price of wood, which, instead of being, at its present rate, an injury to the consumer, is actually a material one to the landed interest, who do not make by their woods nearly what they would do by the land if it was grubbed, cleared, and converted to cultivation; and I am so well persuaded of this, that if I was the possessor of woods, in France, I would most assuredly grub up every acre that did not grow upon land impracticable to the plough; and I should do this under the firmest conviction that my speculation would be profitable. If tillage improves, and freed from tithes and inequality of taxation, no one can doubt but it will improve, the price of wood ought to rise very considerably to prevent landlords, who are well informed, from grubbing up; and let it be considered, how vast a premium there is to induce them to such a conduct, in all woods where the growth is antient, as forty, fifty, sixty and a hundred years, at which age many are found in France: the money which the sale of such would produce, placed at interest, and the land converted to tillage, would, in most instances, treble, and even quadruple, the revenue to be gained from the same land, while cropped with wood. Nor is it to be forgotten, that fresh wood-land is generally fertile; possessing stores that, with good management, in respect to cropping, may be made to last at least twenty years, and in some measure for ever. We may safely determine that the price of wood is not risen to a fair par with other land products, until it can no longer be the interest of the land owner to grub up, and till woods yield as good a revenue as the lands around them, *well cultivated*. It is an undoubted fact, that the price is not yet risen near to such a par.

There is yet another, and equally unquestionable, proof, that the price of wood is much too low in France, and that is the coal mines, found in almost

every part of the kingdom, remain, for the greater part, unworked; and that the people burn wood, even in the immediate vicinity of such mines; I was myself served with wood at all the inns, at and near the coal mines wrought, of Valenciennes, Mont-Cenis, Lyon, Auvergne, Languedoc, Normandie, Bretagne, Anjou, &c. &c. Is it possible to suppose that this would be the case if wood was risen to its fair par with other commodities?

The conclusion to be drawn, from this state of facts, is sufficiently clear, that the legislature ought not to take any steps whatever to encourage the production of wood, but leave it absolutely free to rise gradually to that fair price to which demand will carry it; and that the societies and academies of agriculture, composed of citizens, that is to say, commonly of mere consumers, uninterested in the production, ought to cease their unjust and impertinent clamour against the price of a commodity which is much too cheap. Whenever the price of wood rises too high, coal mines will every where be effectually worked, and the people in sight of them most assuredly will not burn wood.

We have of late had, in England, the same vulgar apprehension of a want of wood, especially for ship building, which has disgraced France. No wonder timber has been destroyed in both kingdoms, while the price was inadequate to the expence of raising it. Timber for ship building, as well as cord-wood, should at least bear a proportion with corn, meat, butter, wool, &c. which the ground might yield if not occupied in a different manner. The comparisons made are by landlords, who look only at *rent*, but the national interests require that *produce* should be consulted. The argument commonly used, by the proprietors of the *landes* of Bourdeaux, against cultivating them, is, that they yield at present, in pines, a better *rent* in resin than they would do for cultivation, which is certainly true, if the culture introduced was not good; but what a loss to the nation to have lands employed to yield, like all the woods of the kingdom, a gross produce of 16 liv. per acre, instead of 40 liv. the produce of arable land? Those who contend for encouragements to planting, because wood is dear, call for the marvellous improvement of converting land, which now yields 40 liv. to the state of yielding 16 liv. ! It is just the same in England; our societies offer premiums for planting, and, as far as those premiums are claimed, or induce men to think planting an improvement, they are attended with the mischief and absurdity of preferring a small to a great produce. There are tracts of *impracticable* land, I will not say *waste*, because nine-tenths of our waste lands, like those of France, are susceptible of cultivation, and therefore it is a public nuisance to plant them: it may be profitable to the landlord to plant quick growing trees, because he considers only *rent*, but societies and the nation should look at *produce*, and consequently discourage all planting.

The

The common argument, that is founded on the supposed necessity of a Royal Navy, I should be sorry to bestow three words upon; for I hold every idea of a great naval force to be founded on very questionable theories. Injurious to other nations in its object, which is that of extending to the most distant parts of the globe the mischievous effects of ambition; and all the horrors that attend the spirit of conquest, when flowing from the worse spirit of foreign commerce. A great navy affords the means of spreading what may to Europe be called a domestic quarrel to the most distant regions of the globe, and involving millions in the ruin of wars, who are in justice as unconcerned in the dispute as they are removed by distance from the natural theatre of it. And whatever commercial necessity, founded upon the worst principles, may be urged in the support of it, yet the expence is so enormous, that no nation, it is now well understood, can be formidable both at land and sea at the same time, without making efforts, that throw our own burthens, by means of debts, on our innocent posterity. Mr. Hume remarks, that the British fleet, in the height of the war of 1740, cost the nation a greater expence than that of the whole military establishment of the Roman Empire, under Augustus, while all, that deserved to be called the world, was in obedience to his sceptre; but in the late war, the expence of our fleet amounted to more than the double of what attracted the notice of that agreeable and profound politician, for the naval expence of 1781 arose to 8,603,884l.

The ambition of statesmen is ready at all times to found upon a great commerce the necessity of a great navy to protect it; and the next step is, the supposed necessity of a great commerce to support the great navy; and very fine arrangements, in political œconomy, have been the consequence of this mischievous combination. The delusive dream of colonies was one branch of this curious policy, which cost the nation, as Sir John Sinclair has calculated, two hundred and eighty millions! Rather than have incurred such an enormous expence, which our powerful navy absolutely induced, would it not have been better had the nation been without commerce, without colonies; without a navy? The same madness has infested the cabinet of France; a great navy is there also considered as essential, because they have in St. Domingo a great colony; thus one nuisance begets another. The present century has been the period of naval power. It will cease in the next, and then be considered as a system founded on the spirit of commercial rapine.

But whatever necessity there may be for navies, there is none for raising oak to build them, which it is infinitely better to buy than to cultivate. There is no prospect of exhausting the oak of the north, of Bohemia, Silesia, Poland, Hungary, and the territories on the Adriatic, for centuries to come; the price will rise as carriage becomes expensive, but the supply will remain for ages. So long

ago as the beginning of the last century, we used fir for building, from the scarcity of oak*; and notwithstanding the immense consumption, since the countries that supply it promise to continue that supply for five centuries to come.

A vessel of the first rank is said, in France, to demand 60,000 cubical feet of timber†; but a later account makes it much more considerable.

	Quantity in a Ship of 116 Guns.		Quantity in a Ship of 74 Guns.
Cubical feet,—First species,	77,520	—	47,356
Second ditto,	39,840	—	16,161
Third ditto,	5,896	—	12,300
Fourth ditto,	1,250	—	1,780
Fifth ditto,	180	—	19
Plank,	1,995	—	1,497
	<hr/> 126,681	—	<hr/> 79,113
Fir,	8,449	—	6,338‡

The common price of oak 3 liv. the foot.

I cannot quit the subject of woods without remarking, that many of the nobility, in France, have given that attention to the introduction of exotic trees, which would have been a thousand times better applied to improving the agriculture of their districts: I saw many places, the owners of which affected to make a reputation by their evergreens, and other plantations, while living in the midst of lands, under a cultivation disgraceful to the kingdom, and the same even on their own farms. For one fol that France will ever be improved by their exotics, it was in their power to have improved her many louis, by very different exertions.

* “And now of late, for want of other timber, we begin to use fir for building of houses.” *An Old Thrift newly revived, or the Manner of Planting, &c.* by R. C. 4to. 1612. Black letter. P. 7.

† *Recherches sur la Houille d'Engrais.* Tom. ii. p. 25.

‡ *Encyclopédie Methodique.* 4to. *Marine.* Tom. i. part 1. p. 163.

CHAP. XVII.

On Some Economical Practices, in France.

SOME scattered minutes, not absolutely useless, may, perhaps, better be thrown together than burnt; for ingenious men sometimes catch hints from a flight mention of practices, and apply them to uses not at first thought of.

Building.

LANGUEDOC.—*Montauban to Toulouse.*—At a brick-kiln, observe that they burn only faggots of vine-cuttings.

Bagnere de Luchon.—For building the new bathing-house erecting here, by the states of Languedoc, they work the lime (burnt from a fine blue hard stone) with gravel instead of sand, of which they have none in the country; and, on examination, I found this gravel to be a true lime-stone one, the same so often met with in Ireland. I could not find that the mortar was the harder or better for this; but, on breaking, rather softer than that of sand. They have here a very effectual method of cementing stone; when squared blocks break, they join them very easily, by applying this cement;—resin, three-fourths; sulphur and wax, one-fourth; powdered stone, of the sort to be joined, enough to give it the right consistence when melted. This holds the stone so firmly together, that the solid part will break rather than at the junction.

NORMANDIE.—*Carentan to Coutances.*—They build here the best mud houses I have any where seen; very good ones, of three stories, are thus raised: and considerable offices, with large barns. The earth and straw well kneaded together, are spread, about four inches thick, on the ground, cut in squares of nine inches, and these tossed from a shovel to the man on the wall, who builds it; it is finished, layer by layer, and left for drying, as in Ireland; the layers three feet high, and the thickness of the walls about two feet; they make them projecting about an inch, which they cut off, layer by layer, perfectly smooth; if they had the English way of white-washing, they would look as well as our lath and plaster houses, and be vastly better and warmer. In good houses, the doors and windows are in stone work.

Bernay.—Mud walls to inclose gardens, and for fruit, well built and thatched at top.

CHAMPAGNE.—*Epernay.*—Mons. Paretclaine's new oak floor, which is the common fashion of France, of short scantlings, in a sort of Mosaic, costs 40 liv. the square toise of 6 French feet, including joists and all. They are dove-tailed
along

along the sides, but nailed at the ends; the nails knocked in, and a plug of wood driven in and plained off.

Lime.

LANGUEDOC.—*Bagnere de Luchon*.—The lime-kilns here, while burning, have a remarkable smell of burning sulphur, from the quantity of that mineral, with which the lime-stone is mixed. They build their kilns oval, swelling in the middle, with a mouth, not quite at the bottom, where they put in the wood: the upper part is covered with stones, in order to keep the heat in. They are 24 hours burning the lime. When burnt, stop the mouth close, and leave it to cool, which takes three days; after which, they take the lime out. A kiln holds 400 septiers, which may be supposed the septier of Paris. They carry, with a pair of oxen, but 2 septiers. Sell it at 40*s.* to 45*s.* the septier. Such a quantity of lime takes 600 faggots to burn, and a little other wood.

FLANDERS.—*Armentieres to Montcassel*.—Heaps are lying in some of the fields, ready for spreading. It is burnt in the country.

MAINE.—*La Fleche to Le Mans*.—Lime burning; the price 5 liv. the pipe, of 2 barriques.

Beaumont.—Lime-stone plentiful, yet lime 10 liv. the pipe.

Alençon to Nonant.—Lime-stone every where, yet lime 16 liv. the tonneaux, of 2 pipes.

BOURBONNOIS.—*Moulins*.—Lime 55*s.* the poinçon, 30 inches high, and 22 diameter.

VIVARAIS.—*Pradelles*.—Lime 9*s.* the measure of 32 lb.

Fences.

NORMANDIE.—*Pays de Caux*.—The fences here resemble more the double banks and ditches of Ireland than any I have seen: parapet banks are thrown up out of a double ditch, sloped; and upon them are planted a hedge, and one or two rows of trees; and the soil is so rich, that all thrive to such a pitch, as to form hedges 40 or 50 feet high, and perfectly thick. By means of some small inclosures of this sort, around every house, every habitation is a redoubt, and would make the country very defensible for a small army against a great one.

Pont L'Eveque.—Many of the rich pastures here are so well fenced, that one can no more see through a single hedge, than through a wood; yet there are many willows in them, with only a mixture of thorns and bramble; but they are so well trained, and of such a luxuriant growth, as to be impenetrable to man or beast.

In fencing little is to be learned in France, yet a considerable portion of the kingdom is inclosed. In England we have carried that art to a perfection of which

which the French know little. It is only in a few districts, where gates and stiles are regular; in others, a few bushes, put in a gap, supply the place. Whenever the French have invested in their agriculture, the sums it ought to attract, at least three or four thousand millions of livres more than in it at present, these objects will receive an attention which they have not yet commanded. They are, by no means, unimportant; and as far as connected with inclosing, in general, are essential to prosperity.

Fish Ponds.

SOLOGNE.—This province abounds very much with ponds of all sizes, which let at from 5 liv. to 12 liv. the arpent.

BOURBONNOIS.—*Moulins.*—Through every part of this province, which I saw in crossing it, in two directions, the number of fish ponds is very considerable. The country, though in extensive views flat to the eye, is, on a nearer examination, found to swell into a variety of gentle inequalities, which form valleys, with small brooks, springs, or streams, in them, as eligible for a residence, and agreeable to the eye, as it would be beneficial to cultivation, if they knew how to apply them. Mounds are made across these little vales, to form ponds; and there are mills at their heads, when the streams are considerable enough. These ponds are from two or three to ten, twenty, and thirty acres, and some a great deal more. They are all fished regularly every second or third year, and the fish sold, at so much a thousand, to the merchants, who send them, by the Allier, Loire, canal of Briare, and Seine, to Paris. On one estate, I saw eight ponds, that paid 800 liv.; on another, four paid 800 liv.; and, on a farm of about 400 acres, four ponds paid 1000 liv. Water deceives one so much in guessing the superficies, that I may be erroneous (for nothing is measured in this province); but I should guess, that land under water paid 20 liv. an acre at least, instead of 3 liv. which is the more common net produce of the country; and, at the same time that the proprietor receives this superior benefit, his table is, by the terms of the contract with the merchant, who stocks the ponds himself, allowed to be amply supplied.

BRESSE.—The ponds of this little province and Dombes, cover 66 leagues square of country, and are found terrible to population, from the effect they have on the climate*. In 1764, ponds in France generally let at 5 liv. to 7 liv. per arpent†.

The management of ponds is vastly better understood in France than it is in England, both as to stocking, adapting the sort of fish to the soil, clearing the

* *Observ. sur L'Agricult. par Mons. Varenne de Fenille*, p. 270.

† *Chanvalon Manuel des Champs*. 12mo. P. 363.

ponds, emptying, fishing, &c. &c. In all Catholic countries, fish is of more importance than in Protestant ones, and this occasions more attention being paid to them.

Leaves.

LANGUEDOC.—Gathering, the end of July, leaves of mulberries, for feeding cattle.

POITOU.—See them gathering elm leaves for cattle, particularly for mules, the first week in September.

TOURAIN.—Clipping elm trees to feed cows, in September.

Near Clarey, they gather the vine leaves in September; we saw them spread, in large quantities, by the sides of the roads, with many women, girls, and boys, gathering and drying; they are for winter provender for their cows; this custom is general through the country. They make an infusion of these leaves in hot water, by boiling them with some bran; which mixture they give to their cows, in snow or frosty weather, with straw. Was a cow fed with leaves alone, it would require 8 or 10 arpents to support a cow the whole winter; they reckon them very beneficial for this useful animal. Leaves are sometimes sold, in which case, such a heap dry as would equal 30 lb. of hay, sells for 20*s*. but all this varies according to the year. An arpent produces seven or eight times that quantity.

ISLE OF FRANCE.—Among the winter provision which Mons. Cretté de Paul, of Dugny, makes for his sheep, is that of faggots, cut in summer while in full leaf, and housed as soon as dry: these he has found to be of considerable use, and to answer the purpose perfectly well. When given to the sheep they pick off every leaf carefully. Such a practice well deserves attention in England.

DAUPHINE.—About Montélimart the leaves of all mulberry trees are gathered in November for feeding sheep. A gentleman, near the same place, feeds a flock of Spanish and half bred sheep, with faggots cut in summer from full leaved trees.

PROVENCE.—The president de la Tour d'Aigues making elm faggots, in September, for his sheep; a common practice: poplar also and oak; indeed all sorts are thus applied. Olives are also excellent; one of twelve years growth will thus yield to the value of 12*s*.; every second year, on good land, more than the expence.

For the better understanding this subject I beg to refer the reader to an excellent and useful memoir on the subject, by Mr. Professor Symonds, inserted in the *Annals of Agriculture*, vol. i. p. 207*.

This is one of the æconomical practices of France, which well deserves imitation in England: not gathering leaves, for I question whether it would answer the

* See also *Mém. de la Soc. Roy. d'Ag. de Paris.* 1785. *Trimestre d'été.* P. 22.

expenditure of labour, but cutting faggots in summer instead of winter; drying them like hay before binding, and then stacking and thatching for feeding sheep. I made a stack of them in 1789, but the two following winters were so open and mild, that I could not experience the benefit. I shall, however, make other trials on the practice, for I have not the least doubt of its answering as well here as in France. Leaves are very nourishing, but astringent, and wholesome for sheep, and such stores might be got at easily when the ground is covered with snow, to the great saving of hay. Considering the immensity of leaves that fall to waste, in a woodland country, it is certainly an object that well deserves attention.

Threshing.

ROUSSILLON.—LANGUEDOC.—Through all the southern parts of this province, they tread out the corn with horses and mules; a man in the centre of the threshing floor, in the open air, drives them round, and other men supply the floor, and clear away the straw. In some conversation I had on this method, between Narbonne and Nissau, I was assured it was far preferable to the use of flails. That 24 mules or horses, and 12 men, would *depiqué*, as they term it, 150 septiers of wheat in a day. That some farms produce 2000 septiers of corn; what would flails do for such a quantity? I examined the wheat, and did not find it more damaged than with flails; but the climate is to be remembered, which makes the grain much harder than any with us. Seeing some flails going also, I demanded the reason, and was told that the master would sometimes have particular parcels of straw threshed so, to get the corn that was left in it, if he suspected too much; at others the labourers desire to do it for themselves, which is sometimes granted.

DAUPHINE.—*Loriol*.—But Monsr. Faujas de St. Fond has tried threshing the corn all at once with flails, and finds it much better than with horses, &c.

Monrejeau to Lann-Maison.—The oats are all mown to the standing corn; one woman follows each scythe, gathers and lays them in gavels, ready to be bound afterwards in sheaves.

Orange to Avignon.—The same method of threshing with horses, &c. prevails here; and they stack their straw very neatly, plastering at top with white clay, mixed with straw and water.

PROVENCE.—*La Tour d'Aigues*.—Seeing a large quantity of the President's wheat spread on cloths, for drying in the sun, and inquiring what it meant, I found it was washed, as all is, of which the best bread is made; owing, beyond all doubt, to the mode of threshing, which renders it so foul that this operation is necessary.

CHAP. XVIII.

Of Tillage, and the Implements of Husbandry, in France.

NOT an object of the first consequence, but of too much importance to be neglected by a farming traveller. In a climate in which the sun has power to burn up weeds, with only a scratching of the soil, and in a territory where harsh, obstinate, churlish clays are almost unknown, perfection of implements, and great powers of tillage, are not so necessary as in the less favourable climate and soil of England.

Of the Tillage, and Laying of Lands.

PICARDIE.—*Calais*.—Lands well and straight ploughed; three horses.

Montreuil.—All turn-wrest ploughs; which, from having two breasts, go alone almost as well as with holding; I saw a man leave his plough to chat with the driver of a load of bark, and the five horses went on and performed their work as well without as with him: the double breast occasions the cutting double work. The man, while I held it for a bout, told me that his master expected him to plough 30 measures thrice in the summer.

Bernay.—A pair of horses.

Abbeville.—Very badly, with four asses or two horses. Feed their asses with hay and oats.

Piquigny.—Women ploughing with a pair of horses.

PAYS DE BEAUCE.—*Toury*.—Do not give the first stirring to their fallows until May. Plough well, straight, and clean.

SOLOGNE.—*La Ferté*.—Plough their poor sands all on three feet ridges; and assert that without them they should get no corn, as they preserve the sand from plastering in rains: this is an odd idea, as plastering such sharp sand is usually a means of improvement; but showers here certainly fall with much greater violence than with us; their crops, however, are so beggarly as to give no weight to their opinions. Their teams of horses are kept out all the year, as they have the pasturage of the landlord's woods for them. What a barbarous system! Plough an arpent a day with three. Plough also with six oxen, and this in sand.

To La Motte Beuvron.—Plough with eight bullocks, and on sand! Buckwheat is given before winter, mixed with oats; if alone, before it has had a sweat, it gives the cholic; but afterwards, alone safely.

Nonan

Nonan le Fusilier.—For two years past, chaff cut at the post, of rye straw, mixed with buckwheat, for horses, and found excellent: the scarcity of forage alone drove them to this useful experiment.

La Loge.—Through all Sologne the land is ploughed on to the two-bout ridge of three-feet, and they never stir it in any other way.

Salbris.—Plough their sandy gravels with six to eight oxen, that are pretty good, selling for 6 or 7 louis each.

BERRY.—*Verfon.*—Tillage all done with oxen, harnessed by the horns; a pair draw a plough; some are not bigger than our Alderney cows; the furrow about four inches deep, but hardly to be called a furrow, so irregularly and ill cut. They are now ploughing up oat stubbles for wheat; an Englishman can hardly conceive what work they make; they give four of these wretched scratchings for every crop.

NORMANDIE.—*Argentan.*—Wretched ploughs drawn by four oxen.

LIMOUSIN.—*Limoges.*—Plough throughout the province with oxen or cows, harnessed by the horns.

QUERCY.—*Pellecoy.*—Walked from the road to a peasant at plough with two cows, about as big as Alderney's; it is not possible for an English farmer to conceive how badly; trenches $3\frac{1}{2}$ or 4 inches broad, and two deep, were scratched parallel to each other, and the earth driven aside by two mould boards, some one way, some another; no coulter to the plough: they do about an English rood a day. A shim, where there are no stones, and a Kentish nidget, where there are, would do the work much more effectually, and ten times as quickly. But their burning sun destroys weeds better than such tillage. Their hoeing is excellent and effective, and to this their crops are more owing than to their ploughing.

Caussade.—The lands ploughed as straight as in Suffolk; all by oxen or cows.

LANGUEDOC.—*Montauban.*—Plough with oxen, without either reins or driver.

Toulouse to St. Lyce.—The ploughs better, the mould boards being larger. The fields are thrown into fatches or flat lands. Ploughs are ox-hoeing the vines, each ox walking in an interval with a row between them, and yoked with a sliding yoke, to vary the distance from ox to ox, and baskets at their mouths to prevent their biting the vines. The rows at five feet, and the plants at two.

Bagneres de Luchon.—They ox-hoe the rows of their maiz. All oxen yoked by the horns.

ROUSSILLON.—*Bellegarde to Perpignan.*—Plough with mules yoked; also with asses in the same way. Earth-boards of the ploughs are to the left.

Pia.—Day's work of a man, his plough and team, 3 liv.

LANGUEDOC.—*Narbonne*.—Of many ploughs now going (July), most are drawn by mules, in yokes; the plough beam fastened to the centre of the yoke; earth-board to the left. They plough well.

Pezenas to Montpellier.—The oxen all yoked by the horns. Ploughing olive grounds with one horse; the plough of an odd construction, the beam dividing and forming shafts for the horse.

BEARN.—*Pau to Moneins and Navareins*.—All this country is ploughed with oxen that are good, and in good order.

GUIENNE.—*Agen to Aiguillon*.—Plough with very fine cream-coloured oxen, a pair to a plough. All draw by their horns.

Tonneins.—A pair of very fine oxen plough a journal a day; that measure contains 33,750 square feet, and is to the English acre as 33 to 38. The plough beams all fasten to the yokes.

To La Motte Landron.—They are now (August) ploughing for *jarouche* and forage (by the last is meant oats for foiling), and are very attentive in the ordering and finishing their lands, and covering the seed; breaking the clods with a wooden beetle and rake, so that the high ridges are brought down in such a manner as to admit the scythe, and at the same time the furrows are kept open.

Barsac.—They are now ox-hoeing their vines quite clean; and see one piece of others ox-hoed.

POITOU.—A pair of oxen without either driver or reins.

TOURAINNE.—*Montbazoin*.—Horse-ploughs; saddles on the horses with a bar like a curricule, one from saddle to saddle, to which the beam of the plough attaches. A bad plan, as by this means the horse does not draw from his shoulders, where his strength and weight lie.

SOLOGNE.—*Chambord*.—The poor sands of this country are laid on the three feet ridge of two-bouts, and rye and buckwheat sown on them; the furrows are as wide as the ridges, and yield nothing but weeds.

La Chapelle La Reine.—Plough with two horses and no driver, yet the price per arpent is 5 liv. 100 perch 22 feet.

ISLE OF FRANCE.—*Mellun*.—Plough into broad flat lands, and very straight. Many ploughs with three horses, one before a pair; no driver.

Liancourt.—In the general arrangement of their farms, they reckon three horses to a plough, though they never use more than two at a time; and a plough to 75 arpents ($1\frac{1}{4}$ acre), 25 of which are fallow; and a common calculation here is 1500 liv. rent per plough, which makes 20 liv. per arpent. They never used oxen until the Duke of Liancourt introduced them from England.

Paris to Villers Coterets.—The whole way the lands are ploughed quite flat, with a turn-wrest wheel-plough, and much of the wheat is overflowed, for want of furrows to carry off the water from the late rains.

PICARDIE.—*La Fere*.—Four horses in the ploughs, and no driver.

St. Quentin to Cambray.—Thirty-five horses to a farm of 800 septiers; and twenty horses on one of 400. The latter proportion is seventeen on 400 English acres.

FLANDERS.—*St. Amand*.—This season (November 1, 1787) the wheat here, owing to the excessive rains, is put in as badly as possible. The lowest and wettest fields are perfectly flat, and half of them, in parts, overflowed. Furrows are drawn, as marks for digging, which is doing, through all the country, with a narrow spade, of 5 inches wide, and 8 long; these furrows are from 6 to 8 yards asunder, but done poorly, miserably crooked, and the whole unfightly.

Lille.—There is a minutia of labour and attention given to land in this country, which must, in the nature of things, result from that over-population, which is found every where in France, on small properties. I saw many men and women hoeing up the land with great mattock-hoes, almost a foot square, with long handles; by which they are lifted high, that in the fall they may cut 4 or 5 inches deep. They work by lines that mark out beds, 5 or 6 feet broad, along which other men dig out trenches, a full spit deep, spreading the earth over the beds. Wheat seed is then sown, and covered by a man's drawing a wooden harrow over it: another follows with a hoe, to cut clods, and level inequalities. I calculated, in my mind, what this would cost me in Suffolk, and I made it amount to 3l. 10s. per English acre. Such operose methods are not in practice here, because the labour which comes to market is cheap, since such labour, like every thing else in Flanders, is what is commonly called dear: it springs alone from the population that is attached to the possession of land in property; and is, relative to any other country, a system of trifling; a waste of labour not greatly better than picking straws. Perhaps it is owing to this over-population of the fields, that Flanders, with the richest soil in Europe, cannot feed her own towns, but is forced to import large quantities of wheat from Artois and Picardie, where large farms enable those provinces to spare to the wants of their more subdivided neighbour.

About four or five miles from Lille begins another method of laying their lands; it is that of ploughing them up, in very broad high arched beds, of all breadths, from four rods to ten or twelve. When inclosures are small, a whole one is formed into but one land; and in larger fields, there is a drain left at every parting furrow, which is either planted with a row of alders or willows, or dug into a trench and laid to grafs. In a land ten or twelve rod wide, the centres may rise four or five feet higher than the bottoms of the furrows; the slopes on each side very gentle and regular; and so equal, that all water is effectually drained off. I discoursed with some farmers on this method, stating objections

objections and hearing their answers. They insist, that no other method of laying land dry, is so effective, cheap, durable, or commodious. That all the methods I mentioned, are known and practised in some part or other of Flanders, but that all the best husbandmen have one opinion, are united in thinking this mode superior to all others. That planting alders or willows (which are always kept low, by constant cuttings), or having grass in the furrows, are not necessary parts of the system, and that the furrows, in a few years after throwing up the lands, are as good as the rest of the field. The neatness and regularity with which the system is executed, is extraordinary; the borders, headlands, and sides of fields, are so dug away, that a small one has the form of a feather-bed, the feathers of which are driven towards the middle. I never saw this system so well executed as here, though I have known it copied in England; not in the highlands of many of our counties, which are, on comparison, a barbarous method, but in the practice of a few individuals who had seen the effect in Flanders.

Armentieres.—Passing this town, meet with another exertion of industry, that deserves attention. Many stubbles were ploughed into beds eight or ten feet wide, and the furrows digging out, and the earth spreading on the beds. I supposed this was for wheat, but, on inquiry, found that these fields were intended for beans. They leave the land, thus prepared, till March, and then plant, without further tillage. As spring tillage is thus avoided on wet land, the system must be admitted to be excellent.

Mont Cassel to Berg.—The lands not raised so high as those above-described, nor with equal skill or attention, and this wet season (November) shews the consequence of it; they cannot get on to their lands to sow wheat, but most of the high lands are sown, and some of them green.

Artois.—Lillers to Bethune.—The lands broad and arched; but gently. From Ardres to Bethune, all the way, the greatest attention to plough the land the moment the corn is carried, yet much is now uncut and ripe.

To Arras.—They are now (August 8,) ploughing the stubbles of such corn as is carried, with one horse, that walks, not in the furrow, but on the unploughed land, by the side of it: the plough beam very short, with a foot; no coulter; a well-curved breast and throat; but too wide in the heel: stir shallow, and do not make good work; do about a measure a day.

Normandie.—Rouen.—All the harrowing is done in this country by men leading many horses. I saw one man leading seven horses, each drawing a harrow: the horses are tied one behind another, obliquely, so as to be out of danger of the harrows.

Bretagne.—Rennes.—Plough with four horses and a driver; or two horses and two oxen.

Vannes.

Vannes.—The common plough team, two oxen; always harnessed by the horns, and a little horse, a mere poney, before them; if no horse, the oxen are led by a woman. They use aukward, ill made, but light, wheel-ploughs.

Auvergnac.—The farmers (metayers) have here the Essex custom of digging away the borders and margins of all arable fields, and carrying them on to the land, which they practise very exactly, as it is done in that county.

ANJOU.—Migniame.—They plough deeper, in common, than ever I saw in any part of either England or France; eight or nine, and even ten inches deep; using six or eight good oxen of the Poitou breed; but it is done, in one respect, badly,—their depth obliges them to carry a furrow a foot wide, yet their share is not six inches; and they do every thing on four-feet ridge-work. The great strength of the team is most wanted for the roots of the fern, which are now lying about the land in heaps.

La Fleche to Le Mans.—They are now ploughing sand land, very slowly, with four bullocks and two horses. Preposterous!

NORMANDIE.—Beaumont.—Two bullocks and two horses, to draw thirty bushels of dung.

To Alençon.—Plough with four or six bullocks, or horses, and a driver.

Bernay.—Wheel-ploughs, with two horses, and no driver. The rich loams here are on broad lands, very well arched.

Tostes.—Wheel-ploughs; three horses, and no driver.

To Dieppe.—Ditto; well ploughed, flat, and deep.

BRIE.—Neuf Moutier.—Mons. Gibert, a considerable farmer and proprietor, keeps fifteen horses for 300 arpents of rich loamy clay (375 acres English).

CHAMPAGNE—Chalons to Ove.—Plough with one horse.

To St. Menchould.—Plough with four horses, without a driver; turn-wrest ploughs.

LORRAINE.—Mars-la-Tour to Metz.—Fallows dunged, after ploughing with six horses (July).

Luneville to Blamont.—Broad lands, and some arched, but no water-cuts, consequently the crops much damaged, whenever rain falls. Plough with four, six, and eight horses, cows, and oxen; all mixed sometimes. I have seen women holding the plough, and a boy driving: wheels, but not turn-wrest.

ALSACE.—Saverne to Wilteim.—Here is a remarkable custom, of both waggons and ploughs being driven by postillions.

To Strasbourg.—The lands broad and arched, as in Flanders.

To Schelestat.—The same lands on the flat rich vale.

Colmar to Ijenheim.—Oxen here improve much on the preceding country: they are harnessed by the horns, drawing singly in lines, and also mixed with horses.

To Béfort.—Plough with a pair of oxen, without line or driver. Arched broad lands.

BOURGOGNE.—*Dijon.*—Plough with six horses.

Bourbon-Lancy.—Plough with six oxen, that draw by the horns. A level country; a sandy gravel.

BOURBONNOIS.—*Chavannes.*—All the arable thrown into one-bout ridges, about sixteen inches broad.

AUVERGNE.—*Riom to Clermont.*—Plough with a pair of oxen.

Clermont to Issoire.—Ploughing with oxen only; some of them good; all draw by the horns.

Fix to Le Puy.—Miserable ploughing; the plough has one long handle; and the man holds a long light pole in the other hand for a goad: a pair of little oxen.

DAUPHINE.—*Montélimart.*—Plough with two mules.

There is no part of England where lands are laid so neatly as in Flanders; but the French have no other province that partakes of this perfection; Alsace is in a similar system, but not so well executed. In general, the tillage of the kingdom is most miserably performed; and many of the provinces are, in this respect, so backward, that, to English eyes, they appear to be pitiably conducted.

The principal question that arises upon tillage is the comparative advantage of using horses or oxen. Both have had their advocates. The principal opponents to oxen were the œconomistes, that fanciful sect, of very worthy and ingenious men, who, from their chambers at Paris and Versailles, offered opinions upon every part of the farmer's business. They divided the arable lands of France into those managed in the great and little culture: in the former, the tillage done with horses, and in the latter, with oxen; and as Flanders, Picardie, Normandie, &c. where horses were in use, being also let at money rent, those provinces were necessarily more at their ease than Sologne, Berry, Limousin, and others in the hands of metayers. This comparison is often made in the writings of the œconomistes, and abundantly more stress laid on the nature of the team than it deserves; they gave many calculations to show, that horses were more advantageous, but all founded on false data; for they allowed only two horses to a plough, but four or six oxen, forgetting that in Guienne, Quercy, part of Languedoc, &c. a pair of oxen plough as well as any pair of horses; an omission this the more extraordinary, because those provinces are among the best cultivated in France: the district of the Garonne is like a garden, and the oxen, large, vigorous, beautiful, and in fine order, the very contrary of the miserable half starved beasts, described by the Marquis de Mirabeau, Mons. Du Pont, Du Quesnay, and other œconomistes. The comparison has been made in England with great accuracy; and the opinion now is, that oxen are the most
beneficial

beneficial and the most profitable, and that a pair of good oxen will plough as much in a day as a pair of good horses. The other æconomical points of the comparison are all in favour of oxen.

But though the superiority, both in saving to the farmer, and in national benefit, is clearly in favour of oxen, yet there want improvements to be made in training and working them. Some step well, and move with as much freedom and activity, on a walk, as horses, but this is not the case with the generality; they are trained to go too slowly, and demand, *for light work*, more hours than horses. This is certainly owing to negligence and idleness of workmen and farming servants, for I am well persuaded, from circumstances I have remarked in them, that they are capable of great activity and quick motion. I have had them of a large size, which have taken leaps that no horse in the world would attempt, a proof not of activity only, but of great muscular strength.

Accustoming them to more speed, even to a trot of five or six miles an hour, is certainly as practicable, in the cool climates of Europe, as it can be in the burning ones of Asia. The fact that they draw coaches at that rate, in the East Indies, seems to have been long ascertained. The Targuzinian Tartars ride on their oxen*: the Nogayan Tartars, of Koundour, do the same†: Mandelsloet‡ rode on an ox part of the way from Agra to Dehli, that carried him seven leagues in four hours: in Kachemire they saddle, bridle, shoe, and ride them as fast as horses||; they also draw their coaches: at Surat, in riding them, they take care their horns are not more than one foot long, to avoid being struck when flies bite; they never shoe them but in rough places: in the caravan from that city, they carry 300 to 350 lb.§: a camel carries 900 to 1000 lb.¶: but in a late account, of great authenticity, 500 and 600 lb. is mentioned as the common load of a camel in crossing the Arabian deserts **: the hackrees, a sort of coach, is drawn in Indostan by oxen; which, when well trained and managed, will maintain their rate against horses at full trot; those of Guzerat and Cambray are as large as Lincoln beasts, and white††: the oxen that are rode in Formosa, go as well and as expeditiously as the best horses, by being trained young ‡‡: the Hottentots train oxen to gallop and even run down an elk §§.

If such quickness of movement could be given to the oxen of France and England, it would be a very considerable object, for it would get over the principal objection to them, and would at the same time render them applicable to a great variety of uses, to which at present they are never put.

* *Isbrandt Ides. Harris' Voyages*, vol. ii. p. 936. † *Russia; an Account of all the Nations which compose that Empire*. 8vo. 1780. vol. ii. p. 85. ‡ *Harris*, vol. i. p. 764. || *Ib.* p. 814. and *Le Blanc's Travels*, p. 54. § *Harris*, vol. i. p. 827. ¶ *Ib.* vol. ii. p. 883. ** *Phil. Transf.* vol. lxxxi. part 2. p. 136. †† *Große's Voyage to the East Indies*, p. 249. ‡‡ *Grozier's General Description of China*. 8vo. vol. i. p. 226. §§ *Sparman's Cape of Good Hope*, 4to. vol. i. p. 230.

Of the Implements of Husbandry.

PICARDIE.—The harrow teeth of wood, all the way from Calais to Clermont. Turn-wrest ploughs, and bad.

SOLOGNE.—The ploughs have all a broad double finned share, and double mould-boards, with wheels; the whole ill constructed.

BERRY.—The plough very ill made; it has two scraps of something like mould-boards, and a long ground-rest, at the end of which is an iron share, four inches wide, something like the shim which they use in Kent for earthing up beans: a hole for a coulter, but I saw none used. Nothing can be worse than its work. They have also turn-wrest ploughs, something like those of Kent, but bad. Beyond Argenton, the beam of the plough fastens to the yoke of the oxen; the plough has a chissel-rest and point, and no other mould-board than two small sticks, stuck in it, with a circularly bent one behind; these sticks answered the purpose of two mould-boards, but very badly; the handles so low, that the body of the ploughman is in a bent position to hold them.

LIMOUSIN.—The ploughs which I saw near St. George, &c. have one mould-board on the left side; the share long, and $1\frac{1}{2}$ inch broad; the beam reaches to the yoke, and consequently saves traices. They plough better than in La Marche.

QUERCY.—The same long beams to ploughs that reach to the yoke; have two very bad mould-boards; the share long and narrow, with no coulter; but the land excessively stoney.

LANGUEDOC.—*Montauban to Toulouse*.—The plough much better than many I have seen in France; it has a broad coulter, and a short nosed share; one mould-board, and that to the left; the plough beam, like many others, fixes to the ox-yoke.

To Noe.—Meet waggons for the first time; the wheels shod with wood, that is, wood upon wood. The oxen all cloathed with linen against the flies, one tape under the tail and another round the neck. The price of these waggons new is 60 liv. (2l. 12s. 6d.); they carry, with a pair of oxen, two casks of wine, containing 4 barriques, which is 20 quintals, or about a ton English. Some pairs of oxen will draw 40 quintals.

GUIENNE.—*Tonneins*.—The ploughs have very long hollow or fluted mould-boards, for lifting the furrow, in order to make sharp high two-bout ridges.

ANGOUMOIS.—*Barbesieux*.—Wheel-ploughs.

ISLE DE FRANCE.—*Melun*.—Large heavy wheel-ploughs, with breasts as wide and thick in the throat, as the heel is broad; must go very heavy for the horses.

Commerle.—Wheel-ploughs drawn by a pair of horses.

Dugny.—One of the best implements I saw in France, was the chaff-cutter of Monf. Cretté de Paleuel; it consisted of two cylinders, with edges that worked into the vacancies of each other, and, sucking in the straw delivered very rapidly, cut it into coarse chaff; one man fed the machine, by spreading the straw on an inclined plane; and a boy drove a single horse, which turned the machine. A tolerable mechanic, improving on the idea, would produce a much more powerful cutter than any yet invented.

FLANDERS.—*Lille*.—Many waggons loaded with chalk stones, &c. with the principal part of the load laid on the hind wheels, and a very small portion on the fore ones; a good sense that reproaches our barbarians in England.

ARTOIS.—The short scythe which they use through this province, and all over Flanders, is one of the most useful implements that can be seen: they call it the *pique*: it is much like the representation given by Mr. Walker in the Annals of Agriculture; only the handle here is much shorter: a man cuts an arpent a day in general with it, and sometimes more; he cuts and rolls into bottes an arpent of vetches (called here, mixed with oats, *dravin*); and he cuts an arpent of any sort of white corn, others following to bind with straw bands, made at home. This is a most æconomical system. The short handle of the *pique* is made to rest against the elbow; he holds it with the right hand only, or rather hand and arm; and in his left he has a stick, with a hook at the end of it, with which he draws or holds the corn in the right position to receive the stroke. They use scythes and cradles also for some works.

St. Omer.—That the *pique* is much easier to work than a scythe, appears from women and even girls cutting stout crops of tares with it. They give 45*s*. per measure of oats for cutting, with the *pique*, and a man does three-fourths per day.

NORMANDIE.—*Harfleur*.—I noticed here, what I may have often passed, perhaps, without seeing it, a pierced roller behind, and before a cart, which turns in the frame, or in the ladders, by which means a load is corded with a small hand-spike, almost in a moment; I have known something like it in the ladders of carts in England, but forget where; here they let down a cart behind, by raising the shafts in the air, set it against a cask, and wind the cask on to the cart, by means of the fore-roller, easily and commodiously.

Avranches.—Sea-sand is drawn in this country in carts, by a horse in the shafts, and another to lead, with two or three oxen between, and all in a line. About Carentan they attach the rope, by which they draw, to the yokes of the oxen, consequently the horse draws them down to the line of his own draught; and their rope to the top of the pole between the two thillers (when they are two), consequently all draw the thill-horses down. A team of five, thus harnessed, does not draw more than from 20 to 24 bushels of sea-sand: the horses are, however, poor small things; and no wonder, from the number of miserable

garran (poney) stallions that infest every stable you enter. The oxen are better, but not large.

BRETAGNE.—*Varades*.—They are now working their ridges, of three and four feet across, with a great timber triangular machine, drawn by oxen, to answer the treble purposes of harrowing, rolling, and levelling.

ISLE DE FRANCE.—BRIE—*Nangis*.—Wheel-ploughs, and very good, except singly the breadth, which is 16 or 18 inches, and in narrow lands loses a fourth; it only wants to be taken in narrower, and left with the share projecting more from the throat.

CHAMPAGNE.—*Mareuil*.—Bad turn-wrest ploughs; but have the Brie one, which they prefer when there are root weeds to cut.

Rheims.—Very light ploughs, with a broad share, and one earth-board, but ill set on; it has wheels on the beam, which is little more than a stick. Women are ploughing.

To Chalons.—Many rollers every where; an implement very uncommon in France.

St. Menebould to Verdun.—Wheel ploughs that are not turn-wrests, with well turned mould-boards. This is among the best ploughs I have seen in France.

LORRAINE.—*Mars-la-Tour to Metz*.—Broad share and good, but too wide at the heel; wheels.

Pont-à-Mousson to Nancy.—Here, for the first time, I met with waggons of a peculiar structure, the fore wheels are within four inches as high as the hind ones, and are high enough to enable one horse, for none are drawn by more, to convey 800 lb. to 1000 lb. Ploughs so wide at the heel, that they are drawn by eight horses.

ALSACE.—All through the part of Alsace, which I have seen, they use ploughs with low wheels; the share round and broad, and as wide on the land side as on that of the furrow, which is very erroneous, for they are not turn-wrests, but with fixed breasts, turning the furrow to the left.

BOURBONNOIS.—*Moulins*.—The common plough a turn-wrest one; but they have another for stirring, called *areou*, without an earth-board.

AUVERGNE.—*Issoire*.—The plough only opens a slight furrow, into which the earth falls again, and buries nothing, and without a hot sun would kill nothing; the share a chissel point, one inch wide at one end, and three inches at the other end for stoney land, or for that which is free, turning it occasionally end for end. An earth-board on each side, but not more than four inches high.

Upon the implements in general, I may observe, that they will in all countries be proportioned to the wealth of the farmers. There is nothing in the kingdom comparable to those which we see in every part of England, where the implements of husbandry are carried to a perfection of which one sees nothing

in any other country that I have viewed. The right form and powers of all instruments, used in agriculture, depending very much on the application of mechanical principles, were proper objects for the attention of those scientific men that compose academies; I do not know, however, that they have done any thing in this respect in agriculture, though such great exertions have been made in manufactures and ship-building. At one period, the ingenuity of mechanical genius in France was employed on agricultural tools; and then, as an ill star would govern, nothing was thought of but drill-ploughs and horse-hoes. Fortunately all invented were absolutely good for nothing, which threw such a discouragement on the practice, that the folly was but of short duration; had they been better it would have lasted longer, and would have done so much the more mischief; for the drill husbandry, at its best efforts, is fitter to amuse very ingenious gentlemen, who aim at great products without attending to expences, than to become the steady staple practice of a kingdom, in the hands of men who cannot easily understand refinements; and if they could understand, could much less afford them. Adopting beneficial courses of crops, that will allow a great increase of cattle and sheep; draining, irrigating, manuring; such objects are applicable to common farmers, little and great; but the refinement of drilling, applicable but to certain crops and certain soils, is not adapted to the mass of husbandmen, by whose more plain exertions mankind must be content to be fed.

CHAP. XIX.

Of Manures and Manuring in France.

PICARDIE.—**T**HROUGHOUT this province, most of the way from Calais to Clermont, the dung is now (May) carried out and ploughed in upon the fallows; it is, in a long strawy state, and not one-fifth part rotten; nor half of it ploughed in.

PAYS DE BEAUCE.—*Toury*.—Many pits of white marl in this rich plain of Beauce, quite to Orleans; the fine loam four or five feet deep on it. They spread it on their lands, but the quantity very small; nor did I see any signs of old pits.

SOLOGNE.—*La Motte Beuvron*.—The rye-stubbles are (May) collected in heaps on the land, having been left so all winter, to prepare it for rotting for manure. Surely they might find a better way of doing it; housing their sheep, as they do, at noon as well as night.

LIMOUSIN.

LIMOUSIN.—*Ufarch*.—Collect leaves to make manure with.

LANGUEDOC.—*Nîmes to Quissac*.—In cultivating wastes, or old neglected pieces, they pare and burn; also collect turfs and clods in heaps, on faggots of box-wood, which they burn.

Lann-Maison to Bagnere de Bigorre.—Cut from their wastes, much fern, which they spread on their cultivated lands, and, setting fire to it, find the ashes equal to a dunging. They also cart much to their stables and farm-yards, to make dung with.

GASCOGNE.—*St. Palais to Anspan*.—Pass three or four lime-kilns, which, my guide assures me, are employed in burning for manure, to improve the wastes that abound so much in this country; and I saw several heaps near houses, without any signs of building going forward.

A general practice through these mountains, and almost to Bayonne, is that of manuring for *raves*, with the ashes of burnt straw. I observed several fields quite black; and, demanding what it was, my guide told me of this common practice here; afterwards I saw them strewing straw thickly over land, part of which had been already burnt on. They do this on a wheat-stubble; but not thinking that stubble enough is left, they add much wheat-straw, and, setting fire to it, burn the weeds as well as the straw, and clean as well as manure the land. With such quantities of fern on all their extensive wastes, I asked why they did not burn that, and keep their straw? The reply was, that fern makes much better dung than straw, so they burn the straw in preference. As soon as the operation is over, they plough the land, and harrow it in rave seed. One large field, thus treated, I saw ploughing for that crop. They both hoe and hand-weed the raves, and have them sometimes very large; many as big as a man's head. Use them for oxen.

Fleurange to Leitoure.—Chop their stubbles exactly as in Suffolk, driving it on with their foot: they gather it for making manure.

TOURAIN.—*St. Maure*.—Here we found a greater exertion in husbandry than is commonly found in France, that of marling. We saw several large heaps of white marl, and at one of them four or five carts at work, each with three horses. It is found almost every where under the country, at the depth of three to five feet; the soil on which they lay it, is a good loam; adhesive, but not clay. They draw it up by buckets, which is a singular practice for such slight depths. The marl is in some pits white, in others yellowish, which is reckoned the best; it is very soft and fat to the touch. They spread twelve cart loads per arpent, of 100 *chainé*, each 25 feet square, 62,500 feet, or more than an acre and half; and it lasts good about 24 years. The landlords, on leases of nine years, pay the digging, and the tenants the carting. Of the yellowish sort they do not spread quite so much as the white. The same account was given at Montbazou;

Montbazon; they spread it on the fallows, after two ploughings; and having ploughed in the marl, manure it with dung, and sow wheat. Make composts also of marl and dung mixed.

Orleans to Petiviers.—Under the greater part of this country there is a bed of imperfect marl, which is over the calcarious stone of which the roads are made. The farmers spread this marl on their lands, at the rate of 10 *tonberaux* per arpent, which lasts twelve years; some, better than the rest, has been known to last thirty years.

ISLE DE FRANCE.—Liancourt.—Within two leagues of Liancourt, there is a navigation from Paris, but no idea, in any part of the country, of bringing manures; no wonder; for they carry flour thither by land carriage; even the millers, who send it regularly, do the same.

SOISSONNOIS.—La Fere.—A vast excavation made in a hill, by digging and burning peat for manure: great heaps of the ashes now here. The price the farmers give is 22*s.* per measure, that holds 60 lb. of wheat, fifteen of which they spread upon an arpent. The effect is very great on all kinds of plants. This peat is unlike any I have seen, resembling an imperfect coal; and the being found, not on a plain, but on hills, for I saw several, and all equally on elevations, distinguish it remarkably from the peats of England. The mine of this hill is nearly exhausted, as the common red loam of the country now appears nearly all around it.

FLANDERS.—Lille.—See many loads of urine and night-soil carrying into the country, by the farmers, for manuring their lands with. It is loaded in casks: each waggon carries 10 *tonneaux* of about half an hoghead English. They lay from sixteen to twenty upon a *quartier* of land, at the expence of 7 liv.: use it for cole-seed, wheat, flax, &c. and find it equally excellent for all sorts of crops.

Armontieres to Montcassel.—Holes are dug in the sides and corners of many fields, for receiving the urine and night-soil, which is brought from every town, in casks, and kept against the season when it is wanted. Some have small roofs built over, to exclude the sun, wind, and rain; and others covered with straw. The most correct and never-ceasing attention with which they procure and use this manure, deserves the greatest commendation.

To Berg.—A good deal of land chalked as well as dunged, and ready for wheat. The chalk is in large hard lumps, but broken and spread most curiously; more evenly than ever I beheld any thing similar in England; where the rough and unequal manner in which marl is rather tumbled than spread over the ground, is a reproach even to our best farmers, who permit those labourers, whose families are supported by poor-rates, to execute their work in that manner, to earn ten shillings a week instead of eight.

NORMANDIE.—Throughout the part of this province which I have seen, they gather their wheat-stubbles, and even bundle it in sheaves: they chop it with an instrument something like a crooked scythe, fixed at the end of a handle of six or seven feet long; but do it much slower than in England, with a common scythe.

Isigny.—Here, for the first time in France, I saw composts of dung and earth made.

Carentan.—Use sea-sand for manuring their pastures, spreading twenty loads per *vergé*, each load twelve to sixteen English bushels. The *vergé* equals 96 English perches. Mix it also with dung.

To Coutances.—Manuring with sea-sand continues hither.

Avranches.—And hither; they have banked out half the river, which is a small arm of the sea, in order to build a bridge; and the countrymen are digging out the blue sea-mud, and carrying it away to considerable distances.

BRETAGNE.—*Dol to Combours.*—Wheat-stubbles gathered carefully; and a great deal of fern cut now (September 1), and in heaps.

Hédé.—From entering Bretagne, paring and burning every where practised, but the heaps too large and too much burnt.

Rennes.—The farmers and gardeners buy the town dung, at 4 liv. the load.

Belle-Isle to Morlaix.—The rough land of this country is reckoned to find fuel and manure: one of the reasons for almost the whole of it being in such a rough savage state. They have an execrable custom, well adapted to perpetuate their deserts, that of burning parts for ashes, to carry to their good land.

Morlaix.—Heaps of shell sand on lays, ready to spread for sowing wheat; the same husbandry is practised on our opposite coast, in Cornwall.

To Brest.—A most excellent custom of going round all the inclosures with an instrument between a scythe and a wood-hook, for cutting up all grass, weeds, and rubbish, on the banks and in the ditches, leaving them in heaps, and then carting them away for making litter and dung; a practice that cannot be too much commended.

Chateaulin.—Paring and burning, the origin of all the culture there is in Bretagne; and the ruin of the province at the same time. They pare $2\frac{1}{2}$ and 3 inches deep; and having exhausted the ashed by three or four crops, leave it to weeds for twenty years before it is fit to burn again.

Quimperlay.—There is here a most singular husbandry, of which I never saw any traces before. It is to pare the rough land, and not to burn, but to pile it up in heaps regularly square, of about 25 or 30 cubical yards in each, and about four of them to an acre; they are squared up very neatly, and then the field is left for some time, to cover itself with a new herbage, which is free from furze and broom, but not quite so from fern; after a time, the heaps being rotten, they
are

are carted and spread, and the land cultivated. Sometimes they cultivate the land before they are spread, as I saw some in pieces of buckwheat. Paring and burning is also practised. This method is inferior to burning; it does not equally destroy grubs, vermin, and weeds; and the double carting is a considerable expense.

Vannes.—These heaps formed in the spring, and many will be spread this year for rye. Here they consist of three-fourths or seven-eighths of turf, pared off from every hole and corner from commons and bad fields, and carried to the good ones; and if this execrable practice is of any antiquity, it will account for the barren and wretched state of the country. Every poor field is made good for nothing, and the good one cropped, in consequence, till it is almost as bad. These heaps continue about Vannes in amazing quantities.

ANJOU.—Migniame.—The common manuring, ten loads of dung, each 3000 lb; but not more than four of Angers dung, night-soil, ashes, &c.

MAINE.—Le Mans.—Marl is here used; 100 pipes are laid on a journal.

NORMANDIE.—Alençon.—Fallows all dunged, with square lumps of dung, quite black, as if cast in a mould; and very thinly, not more than six or seven loads an acre.

Lessiniolle.—Marl employed here; or rather a hardish imperfect chalk-stone; drawn up in buckets; it lasts twenty years. Stubbles cut close and bottled.

Bernay to Elbæuf.—Marl.

Rouen.—Mons. Scannegatty, Professor of Physicks in the Royal Society of Agriculture here, having observed, that, in calcining gypsum, it was apt, for various uses, to be unequally burnt, part being partially reduced to lime, and the rest not sufficiently calcined, invented a furnace for the more equal distribution of the heat; a vault pierced for the fuel, with a long channel beneath, for conveying air, and a door to the mouth of the furnace; at top, various holes, by way of chimnies, for the smoke to issue, and which he closes alternately. He knows when the gypsum is sufficiently calcined, by applying a cold bright iron to these holes; it is insufficiently done while any humidity rises.

La Roche Guyon.—Elm leaves are found to make good dung, but not oak ones; the latter take three years to rot sufficiently.

ISLE DE FRANCE.—Nangis.—There are ass-men, who take marling to do for the farmers, at 18 liv. per arpent (to English acre as 32 to 38). Mons. De Guerchy, after water in a pond, nine crops of oats, and all good.

To Meaux.—Long dung spread and spreading now (July 2), for wheat next year.

Neuf Moutier.—Manure their rich clays with the white marl found under them; which has the appearance of consolidated paste. They fallow for wheat, and manure the fallows in June, with long dung almost in the state of straw; a method

thod they contend warmly for; thinking that a greater degree of putrefaction would be loss of quantity and virtue. But there is a circumstance which seems in fact much to condemn this method; it is, that while the wheat crops are to be ranked among the finest in France, and would indeed make a capital figure in England, the oats and barley are wretched, indeed (soil considered) below contempt. Does not this seem to prove, that the exposition of the manure, through the year of fallow, to the sun, exhausts it to the amount of the benefit which one crop would receive from it, and that the wheat has it at second hand, and the spring corn at the third.

ALSACE.—*Strasbourg*.—Gypsum used as a manure for clover with success; does best on clayey lands; there are mills for pounding it. It is said to last good for some time; 2 or 3 boisseau, of 30 lb wheat per arpent of 24,000 feet between two and three bushels per English acre). If a quantity is used, it spoils the land. What mysteries are these about this manure!

Besort.—Manure with blue marl.

To Isle.—The dunghills here are the neatest spectacles I have any where seen; the walls of them are twisted bands of straw, close and regular as a bee-hive, and some are covered at top with leaves and branches of trees to exclude the sun. Admirable! Deserving universal imitation.

DAUPHINE.—*Loriol*.—Box, in this country, is cut on the mountains for manuring vines, by burying it fresh at their roots. For mulberries also it is excellent. Three trees were planted at the same time, and in the same soil, one with box, and the other without, and there is now no comparison between them.

M. Foujas de St. Fond has tried gypsum, on a large scale, on sandy land, for sainfoin, with great success.

PROVENCE.—*Salon to St. Canat*.—Dead olive branches and cuttings, are piled up with clods and rubbish for burning, as in Catalonia.

Tour d'Aigues.—Paring and burning is practised every where; and, as in Ireland, in corners, holes, wastes, and even ditches, to make heaps of manure for their cultivated lands. They are now (September) burning every where. The common opinion is very much against it; but the President remarks, that it has been practised here uninterruptedly, probably, for 2000 years, yet the land is no worse than it has always been.

The importance of manuring is well understood in many of the French provinces; where faults are to be found, it is more for exhausting the benefit as fast as possible, than for want of knowing the operation and effect. The best farmers in England spread manures for ameliorating crops, in order that the hoe or the scythe may cut off the weeds that are apt to rise in consequence; and as such crops support cattle, the more manure is spread the more manure is made; it is in

in arithmetical progression: on the contrary, when it is given for exhausting crops, as wheat or rye, the benefit is soon exhausted, and the increase, so valuable in the œconomy of a farm, does not take place. By means of spreading the dung for those crops that support cattle and sheep, the live stock of a farm may be always gradually increasing; and it is impossible they should increase, without the farm improving, and corn itself augmenting by the ratio of the product arising.



CHAP. XX.

An English Farm established in France.

AMONG the most interesting observations which the Duke of Liancourt had made, in the various visits he paid to England, was that of the superiority to which the industry of that kingdom was carried beyond the practice of France; and above all, to what a degree of perfection agriculture had attained, founded on experiment, and manifest in an infinitely greater production of corn and of live stock than is to be found in almost any other country, extent and quality of soil considered. Impressed with this fact, he had long cherished the hope of introducing into his own country this source of increasing wealth, flowing as well from the augmentation of produce, as from that of the people employed to raise it; but sensible, at the same time, that the most useful innovations could be introduced by example only—a truth the more applicable to agriculture, from being practised by men of small fortune, little or no education, and consequently full of prejudices, and unequal to the pursuit of any practice, but that of the *beaten track*.—he determined to attempt, as soon as it was in his power, an essay of English agriculture; but as he was desirous of having his example followed, it was necessary that these essays should be so conducted as to ensure success.

His friend, Mon. de Lazowski's residence during three years, in England, whither he consented to accompany the sons of the Duke, facilitated these means. Monf. de Lazowski, whom I had the pleasure of knowing intimately, acquired that knowledge in agriculture, which much inquiry, assiduous application, and frequent conversation with the best farmers, could give to a mind very capable of, and much accustomed to observation: he was likewise no

stranger to the projects of *Monf. de Liancourt*; and in this instance, as on every occasion, his unexampled friendship made him eager to second his views.

In 1789, *Monf. de Liancourt*, on becoming the proprietor of a large estate, situated at thirteen leagues from Paris, resolved immediately to execute the plan he had so long projected: he accordingly engaged an English farmer to come over from Suffolk, with his family, and a common labourer; this English colony carried with it every kind of farming implement; they had with them likewise five oxen, a bull, and five cows, from *Suffex*, to perpetuate that breed, if the country into which they were transported would admit of it; to these were added a Suffolk polled bull and five cows.

The farmer was placed in a farm that had hitherto yielded about two hundred pounds a year; the land was in some parts good, in others bad; it was so divided in quality and in situation, as to render one part fit for the reception of sheep, and the other part for the feeding of cattle; these two objects were those which *Monf. de Liancourt* was most anxious to attain, in the agricultural system he was about to introduce; because they were most advantageous, in a country surrounded by great markets, and very near to that of Paris; he added a large extent of land to the farm, taken from his park, and from other farms, consisting of about eight hundred arpents; two hundred and fifty of which were appropriated to sheep, and the rest to the feeding of cattle; he designed to have made such additions to each part, as would have enlarged the whole to fifteen hundred arpens; to which, in process of time, he would have nearly dedicated the whole of his park. Whilst the Englishmen were beginning their operations, and forming the labourers of the country to the use of the new sort of plough imported from England, instructing the common workmen as to the construction of the new implements, and teaching the women servants of the farm the management of the dairy, the making of cheese, &c. *Monf. de Liancourt* had sent two young labourers, out of the environs of *Liancourt*, to England, who, being placed by me with good farmers in my neighbourhood, qualified themselves to replace, at a future day, the English family, in case these should grow tired of living in France, or to assist them if, as *Monf. de Liancourt* hoped, they were disposed to remain. The artizans of *Liancourt* learnt to imitate the implements, the plough and the cart brought from England, and made them very well.

To the cows, from England, were added twenty-four more from Normandy and Switzerland; the whole herd, a very fine one, amounted, in 1792, to a hundred and five head, and hopes were entertained of increasing the number to three hundred, and of supplying them completely with a sufficiency of food. The young beasts were not then of an age to allow of any decision
being

being made, whether the produce of the Suffolk or of the Suffex breed would best succeed, but the whole afforded the most flattering hopes.

With regard to the flock of sheep—the Spanish ram crossed with the ewes of Berry and the Spanish ewes, and the Berry ram with the Flemish ewes, were the two breeds designed to be established and improved; an English ram from Romney Marsh was also crossed with the Berry ewes, all of which answered perfectly well: the lambs were fine, but as this branch of business had been begun later than the other, the prospect of its success, although well founded, could not be entirely ascertained.

The lands had been put into excellent condition, in a country where inclosures were unknown; every field of the farm was inclosed by deep and broad ditches, with well planted hedges; gates were erected in all; the dry lands were irrigated, and the marshy meadows drained, by cuts underground; old lands, for ages past, judged incapable of yielding any produce, were burnt and rendered fruitful; the buildings on the farm were modelled to the new system, and to the management of the culture that was introduced. The two young French labourers were returned from England, and the English farmer (Mr. Reeve), an excellent one, and a very honest man, satisfied with his situation, with his success, and with the treatment he met in the country, thought only of continuing his employment, of increasing his success, and of seconding the intentions of his master. He was ordered to keep an exact and daily register of all the business transacted on the farm, to show it to whoever chose to see it, and to answer all their questions with truth, mildness, and patience, but not to intice any person to undertake an imitation of the English method of farming; Mons. de Liancourt thinking, that in every innovation, nothing less than self-conviction ought to actuate those who attempt it; and that by raising their expectations too highly they risk the success, which sooner or later would not fail to attend their efforts. The cows of the district were covered by the bulls of the farm whenever they were brought, and the produce from them was already found, by the people of the country, to be much finer; the culture of turnips and of cabbages, for the feed of cattle, absolutely unknown before in the district, began to be introduced; some proprietors inclosed their fields; several others had made, for their own use, farming implements after the English model, and found them answer best the purpose; many more hands were employed, of all ages and of both sexes, in the farms; the English were received with pleasure in the country, and treated in the most cordial manner; every thing succeeded to the utmost wish, and these successes were, in great measure, due to the indefatigable and enlightened vigilance of Mons. de Lazowski, whose heart is equal to his capacity.

The

The events of the 10th of August added the cruel necessity of forcing *Monf. de Liancourt* to renounce the hope of being useful to his country, as he had every reason to expect from these essays, to the other misfortunes he has experienced from the same cause.

Agriculture was not the only object of improvement he sought to transport out of England into his country; he had likewise began to establish the spinning of cotton, a manufactory of linen, a stocking manufactory, and the fabrication of cards; he had engaged the different artisans in each branch from England, constructed buildings, and sacrificed his gardens to these various establishments; which, in 1792, already employed more than a thousand people in the district of *Liancourt*; and, although yet far from having attained to perfection, they were productive of the most salutary effects to the lower ranks of people. As these manufactures have remained in the possession of an Irishman, whom he had taken as an associate, *Monf. de Liancourt* consoles himself with the idea, that the considerable sums of money it cost him to form these establishments, were not wholly lost to the country he was so anxious to enliven and to enrich by industry. These establishments naturally recall to mind what the *Marquis de Mirabeau*, in his book *De l'Ami des Hommes*, relates of the *Duke de la Rochefoucauld*, the grandfather of *Monf. de Liancourt*, having, in 1754, made a sacrifice of one of the finest orangeries in France, and part of his park, to the inhabitants on his estate at *Verteuil*, in *Angoumois*, for the purpose of planting mulberry-trees, and raising of silk-worms, the cultivation of which was at that time scarcely known at *Verteuil*. This benevolent man had, before his death, the consolation of seeing many good intentions crowned with success; *Monf. de Liancourt*, on the contrary, has the sensible mortification of seeing the good he intended to do, and which he had so happily began, destroyed by those very people for whom it was undertaken; and who, by a fatal error, in thinking to hurt him, whose sole endeavours tended to their advantage, have hurt themselves, by destroying an establishment that would have been a germ of national prosperity, and was unique in France.

The destruction brought upon such establishments, by revolutionary anarchy, is one, among a thousand lessons that teach the danger, to the dearest interests of the people, flowing from popular commotions. Little more remains of these agricultural establishments, than the merit of having made them a source of heart-felt satisfaction to a worthy and patriotic individual. That he may be speedily reinstated in a property, which he lived only to improve and to adorn, is the sincere wish of that gratitude and friendship which pens this faint acknowledgement of merit.

I T A L Y.

THE END

NOTES

ON THE

AGRICULTURE OF LOMBARDY.

ONE of the most interesting countries in Europe, for the practice of various branches of rural œconomy, merits a much closer and more minute detail than is possible for a traveller to give, who, from the nature of his pursuit, can do no more than retain a few of the principal features, to point out those circumstances which demand the most studious attention: some of these are so valuable, that years would not be mispent in acquiring a complete knowledge of them. On every subject, except what respects directly practical husbandry the small number of my inquiries is of less consequence, while the pen is in the hand of my esteemed friend, Mr. Professor Symonds, whose elegant memoirs upon Italian agriculture * are fraught with information of unquestionable utility. I shall arrange the minutes I made in Lombardy under four heads, which will include all that I think worthy of the reader's consideration.

- I. General circumstances of the husbandry.
- II. The management of grass lands.
- III. The management of arable lands.
- IV. The encouragement or depression which agriculture receives from various causes.

* Inserted in the *Annals of Agriculture*.

CHAP. I.

General Circumstances of the Husbandry of Lombardy.

LOMBARDY is one of the richest plains in the world ; for fertility of soil, united with the use that is made of it by watering, it much exceeds every other in Europe ; but for mere natural fertility, I take the plain which extends from Holland to Orleans to consist of a richer soil, and it is also of a greater extent. From the foot of the Alps, near Suza, to the mouths of the Po, are about two hundred and fifty miles ; and the breadth of this noble plain varies from fifty to one hundred, containing, probably, about fifteen thousand square miles. The Po bends its stately course through the whole extent, its branches ramifying, in innumerable streams, from the Alps on one side, and from the Apennines on the other ; the prodigious extent of the former range, covered with eternal snows, afford a vast supply of water ; preserved most conveniently in those immense reservoirs the Lago Maggiore, Lugano, Como, Iseo, Guarda, whose waters are the origin of the greater part of the irrigations of Lombardy. But in the Apennines there are no such reservoirs, nor any extent of snow similar to that of the Alps. Thus the space watered to the north of the Po, is probably ten times more considerable than that to the south of the same river.

The soil of Lombardy is, wherever I viewed it, either sand, gravel, or loam. I met with none, or at least, with very little clay (speaking always as a farmer, and not as a naturalist), and no chalk.

Under this head I shall insert the notes I took concerning—1, soil ; 2, climate ; 3, inclosures ; 4, farms and tenantry ; 5, rent and price of land.

SECT. I.—OF SOIL.

PIEDMONT.

After passing the Alps from Niece, and descending towards Coni, in the level and fertile vale of Piedmont, the soil is every where a rich sandy loam, with small appearance of clay. Wherever rivers, or rather torrents are found, we see great tracts of stone and shingle, which were brought by the water from the mountains. The Dora Baitia offers this spectacle ; from that river to Ciglione, are plains and waists of gravel. The rice country of Verceil is a sandy loam. The district of the Sesia is gravel. The Tesin is the same. The gravels of Piedmont are all full of round stones, from the size of an egg to that of twice a man's fist.

MILANESE.

MILANESE.

In the way from Milan to Pavia, great tracts of gravel, which would not be very valuable without water. To the north of the city, about Mozzata, &c. they have two soils chiefly,—a strong loam, a little clayey, blackish, and free from stones: and a gravel mixed with loam, some blackish, dries quickly, and always loose. The Lodizan is a loamy sand, or loamy gravel*.

STATE OF VENICE.

The whole way from Vaprio to Verona, there are very great tracts of gravelly loams; there are also some sandy ones; the soil naturally is not deep or rich, though there are tracts that merit both those epithets. The territory of Verona is, in general, indifferent, and would not be of great value, were it not for water, and much industry. The best meadows and rice-grounds are not more than nine inches deep on stone and gravel. For some miles from Verona, the stoney gravel continues; but towards Vicenza, much fine red and brown, deep, friable, sandy loam, with few or no stones.

ECCLESIASTICAL STATE.—FERRARESE.

In the Ferrarese, between Passo Siene and Bologna, the soil is two feet deep; of a brown sandy loam, with a yellowish hue, under which is one foot of sand, and then blue clay, apparently ferruginous. In cutting, not long ago, through a field, for raising a bank, they met with a heap of antient bricks, five feet deep. From Ferrara to Bologna, the soil is, to all appearance, the richest I ever beheld; deep, friable, and with that degree of tenacity, which marks great fertility; it seems to be entirely a deposition of waters, that have brought those fine particles which are held suspended, and which render that fluid turbid: those almost impalpable particles which are long in subsiding.

TUSCANY.

All I saw of this territory, is a rocky stone brash, or gravel. The loams are compounds of it, with more or less vegetable mould; I saw scarcely any tracts, large enough to be worth mentioning, that are exceptions. It is, upon the whole, though improveable, not a fertile soil; and, if olives were not well adapted to it, would be productive of little beside sheep-walk; to which ani-

* The Lodizan soil is termed, by the Italian writers, *oriola*; a blackish sand, mixed with clay. The Gera d'Adda of *geriva*, a gravel, composed of sand and reddish gravel, with a little clay. The Cremonese, a red ferruginous earth. Sand and gravel every where. *Atti di Milano*, tom. ii. p. 163.

mal, all I saw of this country, is admirably adapted, and would, I doubt not, produce as fine wool as Spain itself.

MODENA AND PARMA.

A rich sandy or gravelly loam is predominant through these dutchies; in many tracts it is deep, moist, and friable, as I saw in the lands which were receiving their autumnal preparation for beans in the spring. In some districts it is of a firm texture, but not clay. Much the same soil, but not equally deep, is found in the ceded provinces of Vogara, Tortona, and Alexandria; but parts of the last more tenacious, and to be ranked among the stiffest I met with in Lombardy.

SECT. II.—CLIMATE.

On the climate of Lombardy, Mr. Professor Symonds is so full and satisfactory, that the reader can be no where so well instructed.

PIEDMONT.

The great complaint in Piedmont, is the excessive heat in summer; equal, I was assured, to almost any that is felt on the globe, and of a suffocating quality; while the frosts in winter are as severe, in the contrary extreme. The pestiferous climate of Sardinia is known to every body; though between 39 and 41 degrees latitude; in the southern part of the island, they are not forwarder than in the Milanese: they cut their corn in the north part in July: in the Milanese before the end of June*.

MILANESE.

The most remarkable circumstance in the climate of the Milanese, is the mildness and warmth of northern and mountainous tracts, and the severity felt in the plain. This fact is found particularly around the lake of Como; upon all the western coast of that lake, which is about forty miles long, the *agrumi*, as the Italians call oranges, lemons, &c. are found, exposed to the open air, in good perfection; yet the whole of the lake is bounded by the high Alps, which, immediately to the north, are covered with eternal snows. On the rich plain of Milan, and thence to the Apennines, no such plant can be left exposed; olives are not seen, and oranges, lemons, and bergamots, must be covered in winter. These *agrumi* are found chiefly on the west coast of the lake, but some are scattered on the eastern. It is the shelter afforded by the mountains, in peculiar positions, that has this effect. The same circumstance is found in the Lago Maggiore, where the famous Borromean Islands are covered with *agrumi*.

* *Rifiorimento della Sardegna*, tom. i. p. 155.

In all the Milanese, dry summers for corn (I believe it is the same every where in Europe), are most productive*.

In an experiment made at Vicenza, in the Venetian State, by the Accademia Agraria of this city, they sowed wheat October 18, 1787; came up the 28th; the ears appeared May 2, 1788; the flowers May 13; reaped June 19.

TUSCANY.

I was at Florence the beginning of November, and the ice was four inches thick; a severity never yet known in England. The English were, at the same time, skating at Rome.

One-fifth of all the productions of the earth are calculated to be destroyed by hail and other accidents.

PARMA.

In the management of the vines in the Parmazan, there is a practice, which shews the constant dread of severe frosts. All the vines are now (in November) turned down, and the end shoots buried † in the earth to preserve them; yet in a wet season they suffer by this treatment, as well as in all seasons, by being stript from the trees, in order to undergo this operation.

Mr. Professor Symonds, in the excellent paper quoted above, removed the common erroneous idea of the fine climate of Italy: I made many inquiries con-

* The same remark was made long ago, in 1540;

MDXL Extructum

Annus his bissextilis fuit, et luminare majus

Fere totum eclypsavit

A septimo idus Novembris ad septimum usque Aprilis idus

Nec nix nec aqua visa de cœlo cadere

Attamen, præter mortalium opinionem, Dei clementiâ,

Et messis et vindemia multa.

It is extraordinary, that in 1779 there was an almost total eclipse of the sun, followed by a fine winter, the same as in 1540. There was a small eclipse on the 7th of April, 1540, but an almost total one the 15th. of April, 1539, and which, for quantity and duration, was very much like that the 24th. of June, 1779. The crop was abundant, as it appears by the prices of the year, in the Ledger of the Cistercian Monks. Wheat, 1539, the moggia, 5 liv. In 1540, ditto, 4 liv. In 1541, ditto, 6 liv. The ducat of gold, or zecchin, then at 5 liv. 15s. Campi (*Istoria di Cremona, anno 1540*) speaks of the extraordinary dryness of this year, the abundance of crops, and subjoins, that the corn was cut the middle of May, and the vintage the beginning of August. This is the harvest near forty days sooner than at present, and the vintage two months. *Opusc. Scel. tom. ii. p. 136.*

† The same practice was known among the antients. See *Strabo*, lib. vii. and *Quint. Curt.* lib. vii. c. 3.

cerning the leading facts, and have every reason to believe that it is, in point of health and agreeableness, one of the worst climates in the world: with the views of a farmer, however, it must be confessed, that the productions which the whole peninsula owes to its climate are very valuable; to omit speaking of Sicily or Naples, I may remark, that planting the poor brashy hills of Tuscany with olives is an advantage unequalled by any thing to be met with in the north of Europe; that the produce of silk throughout Lombardy is an object of the first importance—That rice is found to be an article of almost unrivalled profit.—That the productive state of the meadows is indebted almost as much to the heat of the summers, as to the plenty of water; and, for any thing I know to the contrary, the admirable quality of the cheese also. These are all objects of great magnitude, and entirely derived from climate.

SECT. III.—INCLOSURES.

PIEDMONT.

It is not very easy, in many parts of Piedmont, to pronounce, on a superficial view, whether the country be open or inclosed; but, on a nearer inspection, the greater part by far found to be inclosed; generally by ditches, and, in many districts, with hedges also; which, in some places, are as complete as in the best English counties.

MILANESE.

Much the greater part of this territory is inclosed, either with hedges or by ditches, which serve as conductors of the water used in irrigation. These, in the Lodizan, and other districts to the south of Milan, are planted so thickly, with willow and poplar pollards, that the country looks every where like a wood.

VENETIAN STATE.

Much of the country, from Bergamo to Brescia, is very thickly inclosed with hedges. From Brescia to the Lago di Garda it is the same; but from thence to Verona not equally so.

ECCLESIASTICAL STATE—BOLOGNA.

The whole Bolognese is inclosed. They make and plash their hedges with the nicest attention: made with dead stakes, about four feet high, and tied in cross lines, with great neatness and strength. This care is, however, exerted for the boundary of the farm only; subdivisions of this kind are rare.

TUSCANY.

TUSCANY.

There are no rights of commonage in all Tuscany; thanks to the wisdom of Leopold; every man has a right to inclose his property as he pleases. The Apennines, crossed from Belogna to Florence, are, however, mostly uninclosed, and almost waste.

MODENA.

From the city of Modena to Reggio, the inclosures are very neatly formed, of well made hedges without any ugly sprawling ones; but all either trimmed, or made so often, that they are not suffered to spread.

PARMA.

To Firenzuola all the country is inclosed.

PIEDMONT.—*Tortonese.*

The fences from the Duchy of Modena hither are greatly declined: there are some hedges every where; but many large fields all the way, with only bad ditches or banks.

Lombardy, upon the whole, must be considered as an inclosed country, and much of it closely so. It would indeed be a glaring absurdity to keep land so extremely valuable in an open state. The importance of inclosing is well understood, and where not practised in perfection, it arises from causes that form exceptions rather than effect the general rule.

SECT. IV.—OF FARMS AND TENANTRY.

The predominant feature in the farms of Piedmont is *metayers*, nearly upon the same system which I have described and condemned, in treating of the husbandry of France. The landlord commonly pays the taxes and repairs the buildings, and the tenant provides cattle, implements, and feed; they divide the produce. Wherever this system prevails, it may be taken for granted that a useless and miserable population is found. The poverty of the farmers is the origin of it; they cannot stock the farms, pay taxes, and rent in money, and, therefore, must divide the produce in order to divide the burthen. There is reason to believe that this was entirely the system in every part of Europe; it is gradually going out every where; and in Piedmont is giving way to great farms, whose occupiers pay a money rent. I was for some time deceived in going From Nice to Turin, and believed that more of the farms were larger than

than is really the case, which resulted from many small ones being collected into one home-stead. That belonging to the Prince of Corignan, at Billia Bruna, has the appearance of being very considerable; but, on inquiry, I found it in the hands of seven families of metayers. In the mountains, from Nice to Racconis, however, they are small; but many properties, as in the mountains of France and Spain.

The Caval. de Capra, member of the Agrarian Society, assured me, that the union of farms was the ruin of Piedmont, and the effect of luxury; that the metayers were dismissed and driven away, and the fields every where depopulated. I demanded how the country came to have the appearance of immense cultivation, and looked rather like a garden than a farm, all the way from Coni? He replied, that I should see things otherwise in passing to Milan: that the rice culture was supported by great farms, and that large tracts of country were reduced to a desert. Are they then uncultivated? No; they are very well cultivated; but the people all gone, or become miserable. We hear the same story in every country that is improving: while the produce is eaten up by a superfluity of idle hands, there is population on the spot; but it is useless population: the improvement banishes these drones to towns, where they become useful in trade and manufactures, and yield a market to that land, to which they were before only a burthen. No country can be really flourishing unless this take place; nor can there be any where a flourishing and wealthy race of farmers, able to give money rents, but by the destruction of metaying. Does any one imagine that England would be more rich and more populous if her farmers were turned into metayers? Ridiculous. The intendant of Bissatti added another argument against great farms; namely, that of their being laid to grass more than small ones; surely this is a leading circumstance in their favour; for grass is the last and greatest improvement of Piedmont; and that arrangement of the soil which occasions most to be in grass, is the most beneficial. Their meadows are amongst the finest and most productive in the world. What is their arable? It yields crops of five or six times the seed only. To change such arable to such grass, is, doubtless, the highest degree of improvement. View France and her metayers—View England and her farmers; and then draw your conclusions.

THE MILANESE.

Wherever the country (that I saw) is poor and unwatered, in the Milanese, it is in the hands of metayers. At Mozzata the Count de Castiglioni shewed me the rent book his *intendant*, (steward) keeps, and it is a curious explanation of the system which prevails. In some hundred pages I saw very few names without a large balance of debt due to him, and brought from the book of the preceding year:

year: they pay by so many moggii of all the different grains, at the price of the year: so many heads of poultry; so much labour; so much hay; and so much straw, &c. But there is, in most of their accounts, on the debtor's side, a variety of articles, beside those of regular rent: so much corn, of all sorts, borrowed of the landlord, for seed or food, when the poor man has none: the same thing is common in France, wherever metaying takes place. All this proves the extreme poverty, and even misery, of these little farmers; and shews, that their condition is more wretched than that of a day labourer. They are much too numerous; three being calculated to live in one hundred pertichi, and all fully employed by labouring, and cropping the land incessantly with the spade, for a produce unequal to the payment of any thing to the landlord, after feeding themselves and their cattle as they ought to be fed; hence the universal distress of the country. Those who are advocates for small farms, should come hither, and see how they infallibly generate poverty in every cottage. The surplus of population is not demanded by manufactures, or by towns; the increase, therefore, is only the division of a pittance of food amongst many mouths instead of a few. It is impossible to prohibit procreation, or to force emigration; but it is in a landlord's power to introduce, gradually and prudently, a different system—to occupy a large farm himself, cultivated accurately, by day-labourers, of all ages and sexes, well paid; and if this be not sufficient, to establish a manufacture of some gross and simple kind, to employ the population already existing; and, by a gradual alteration in his farms, to proportion the food to the mouths that are to eat it*. There is at present an inducement to such a change, that ought to weigh very seriously: the example of the French revolution will spread, and will be much more apt to take effect in countries where there is nothing but the great land owner and the poor cottager, than in others where there are intermediate ranks of men of substance, who have an interest in preserving public order. What a temptation to confusion and rebellion is it, to have a country full of miserable metayers, all deeply indebted to the seigneur? Nine-tenths of the people, in such a case, have an immediate interest in burning his castle and his account-books, for he stands single, on one hand, against all the people, swarming on the other; but in the watered plain, where the farms are large and not populous, from so much being in grass, there is every where a race of wealthy farmers, who have an interest in keeping the people quiet,—who are united with the landlord.—and who, paying their men in money, without these long and dangerous accounts, have not the temptation to revolt; or even if they were tempted, they would not have the disproportion of numbers to render it equally dangerous. The great object of men who have

* But instead of the number of farms decreasing, they are increased, as we learn from Sig. Lavizari, *Annot. sul Mitterpacher*, tom. i. p. 221.

property, is at present to secure it—and they can have no security, while they fill the country, by metaying, with swarms of a starving and indebted peasantry. It should be remembered, that the mischievous confusions, plundering, and burnings, in France, were not in the Pays de Beauce, nor in Picardie, nor in Artois, where metayers are unknown, and the farms large; but in the Maçonnois, in Bresse, in Sologne, where all are in the hands of poor miserable metayers; an instance, surely, express to the purpose; and which should have its weight with Italian landlords. But to work a change in this pernicious system, demands a residence on their estates in the country, instead of abandoning them to the rapacity of stewards; it is not by living in the frippery of great cities, that their landed property is to be arranged on safe principles*.

In the watered parts of the Milanese, great and rich farmers are found. Here are the particulars of a farm, I viewed, between Milan and Pavia; viz. 3100 *pertichi*; 1600 of rice; 200 flax; 450 perennial grass; 450 clover; 400 arable crops, wheat, rye, maiz, millet, oats, &c.; 12 horses; 8 oxen; 55 cows; 2 bulls; 40 labourers; rent 20 liv. the *pertica*; the whole capable of being watered. And at Codogno the following are the particulars of one, where 100 cows are kept: 2000 *pertichi*; 100 cows; 1 cazaro; 1 fotte cazaro; 6 others; 9 for corn; 1 agent; 1 guard against thieves, and those who steal water; 1 waterman. To stock such a farm 50,000 liv. necessary. By means of such farms they have rich farmers; some worth 100,000 liv. The general idea of profit, in these dairy districts, is 10 to 15 per cent.; some dairy farms are occupied by proprietors, but the number is inconsiderable.

VENETIAN STATE.

All the lands in the Brescian and Veronese territory are let at half produce, *à la meta*; even vines: but some meadows are usually reserved, and also woods. The proprietor pays the land-tax, and the farmer provides live stock, and pays the taxes on it.

Sig. Locatelli has a farm of 100 campi, within two miles of the city, which yields him 250 zecchini nett; this is something more than 30s. an acre. He has also another farm more distant, of 600 campi, which yields 650 zecchini nett; on which there are 8 cows, 22 oxen, and 150 sheep.

In the Vicentine †, rent, when calculated in money, 2½ zecchini per campo. They have farms so large as 2000 campi.

* This whole passage is left as originally written; before French horrors rendered French politics objects of detestation rather than example.

† Particulars of a farm of 120 campi: 20 of meadow, not watered; 90 of corn; 10 of clover; 15 oxen and young cattle; 3 cows; 2 horses; 4 hogs; 7 men; 4 ditto, with oxen; 4 women; 2 children.

In the Paduan, 100 campi are a large farm; common 60; small 40; and they reckon small ones the best cultivated; if this be fact, and not a matter of opinion in the gentleman, my informant, it shews that their husbandry must certainly be esteemed bad; it is, however, questionable, for the reason added was, that there were more people on small farms; a sure proof that the progress of improvement has not been carried far. To stock a farm, of a hundred campi, 1000 ducats are necessary, reckoning the ducat at 3s. which is not exact; this is a poor stock, for it does not exceed 33s. the English acre. The arrangement of the farms, in the Paduan, may be guessed at, in some measure, from the following particulars; there are found, in the whole district, 288,300 souls; 49,943 cows and fatting cattle; 41,000 plough oxen; 102,000 sheep; 16,598 hogs; 731 mules; 2381 asses. One Professor informed me, that, in his opinion, the great mischief of the country is, that of great land proprietors letting their estates to undertakers or middle-men, who will hire to the amount of 10,000 ducats a year; and in re-letting to farmers will squeeze them so, that they cannot live, to the great degradation of the country. Another professor said, that the district of Padua is not so well cultivated as the Vicentin, by reason of the greater poverty of the farmers and peasants, who are miserable, and have no power to make the land yield well. Indeed I learned, from very good authority, that the Paduan is not equal to the Vicentin, except in the mountains, where the peasants are much more at their ease than in the plain.

ECCLESIASTICAL STATE—BOLOGNA.

Estates here are very generally let to middle-men, who relet them to the farmers at half produce, by which means the proprietor receives little more than one-half what he might do on a better system, with a peasantry in a better situation. The whole country is at half produce; the farmer supplies implements, cattle, and sheep, and half the seed: the proprietor repairs. Silk, and even wine on the same tenure.

Particulars of a farm (Sig. Bignami's) of 600 tornature; 360 on the hills; the rest on the plain: 6 metayers; 36 working oxen; 12 cows; 20 young cattle; 100 sheep. Produce, 2000 corbi of wine; 3 to 400 corbi wheat.

TUSCANY.

Letting lands, at money rent, is but new in Tuscany; and it is strange to say, that Sig. Paoletti, a very practical writer, declares against it*. A farm in Tuscany is called a *podere*: and such a number of them as are placed under the management of a factor, is called *fattoria*. His business is to see that the lands

* *Pensieri*, &c. p. 162. 164.

are managed according to the lease, and that the landlord has his fair half. These farms are not often larger than for a pair of oxen, and eight to twelve people in one house; some 100 pertichi (this measure is to the acre, as about 25 to 38), and two pair of oxen, with twenty people. I was assured that these metayers are (especially near Florence) much at their ease; that on holydays they are dressed remarkably well, and not without objects of luxury, as silver, gold, and silk; and live well, on plenty of bread, wine and legumes. In some instances this may possibly be the case, but the general fact is contrary. It is absurd to think that metayers, upon such a farm as is cultivated by a pair of oxen, can be at their ease; and a clear proof of their poverty is this, that the landlord, who provides half the live stock, is often obliged to lend the peasant money to enable him to procure his half; but they hire farms with very little money, which is the old story of France, &c.; and indeed poverty and miserable agriculture are the sure attendants upon this way of letting land. The metayers, not in the vicinity of the city, are so poor, that landlords even lend them corn to eat: their food is black bread, made of a mixture with vetches: and their drink is very little wine, mixed with water, and called *aquarolle*; meat on Sundays only; their dress very ordinary. Yet in all these particulars they were in a worse situation before the free corn trade. The richest peasants are in the Valdichiano. The most common agreement is, for the landlord to furnish all the cattle and sheep, and to pay the taxes, except the capitation on the peasants family of 3 liv. for all above three years old. In a considerable *fattoria* of 18 poderi, at Castello Villa Bali Martelli, the largest is 200 stiori (36 acres, at $5\frac{1}{2}$; $28\frac{1}{2}$, at 7), and 70 the smallest. Particulars of one of 190 stiori; 1 pair of oxen; 2 calves; 1 horse; 1 mule; no cows, sheep, or hogs; 14 people, of all ages and sexes; taxes, before the grand Duke's redemption, 80 pauls, now 15; tithes 15 pauls, half paid by landlord, half by peasant; this is 6s. 8d. in the whole for about 30 acres. Produce corn, 180 scudi; silk, $6\frac{1}{2}$; wine, 58; oil, 60; in all 85l.; the half, or 44l. is the landlord's receipt for these articles, or above 1l. 5s. per acre, at $5\frac{1}{2}$ stiori to the English acre, and 1l. 11s. if at 7. No small proprietor.

Villamagna.

Sig. Paoletti, rector of this parish, and author of some valuable works on agriculture, which I have had occasion to quote, was so obliging as to give the following detail of the 3 poderi belonging to his living, from which the arable economy of this part of Tuscany will be well understood.

Three Poderi; three Families.

Seed sown.—48 staji of wheat	—	168 stiori of land.
3 ditto vetches	—	7½
24 ditto beans	—	28
6 ditto oats	—	10
Artificial grasses; viz. clover, great millet, vetch, and oats, all for forage	- - -	24
Wood, - - -	- - -	283

The stajo of wheat, of 40 lb. English (52 lb. to 55 lb. Tuscan), sows 3½ stiori, and yields eight or nine times as much; vetches four times the seed; beans three times; oats seven times; the wheat is a tolerable crop; all the rest miserable. If the farms, immediately under the eye of this able writer, yield no more in this *metà* system, we may suppose the poverty of the common products; we have, on the worst lands in England, no idea of such crops as these of vetches, beans, and oats. There are further on the 3 poderi, 36 sheep; 1 mule; 6 oxen; and 4 cows; also 50 barrels of oil, at 5 scudi; and 380 barrels of wine, at 10 liv. the barrel, vintage price, but at a year old 15 liv. or 16 liv.; in silk 25 scudi; and in wood 10 scudi, for three-fourths of the woods are in a state of destruction. These poderi are let *a la metà*; repairs are done by the proprietor; live stock belong to the incumbent, and neither to the church nor to the peasants; implements belong to the tenants; seed wheat, three-fourths to them, and one-fourth to the owner; of spring corn, all to the latter; also all sorts that are put in with the vanga (spade), as the land is so much the better laboured. Let it be remembered, that the spade being preferred to the plough, is the most decisive proof that tillage is in a state of mediocrity, if not barbarism.

MODENA.

In the mountains there are many peasant proprietors, but not in the plain. A great evil here, as in other parts of Lombardy, is the practice of the great lords, and the possessors of lands in mortmain letting to middle-men, who re-let to metayers; under which tenure are all the lands of the duchy. The tenant furnishes one-half of the cattle, and the landlord one-half. To Reggio the number of scattered houses very great; good; and with neatly hedged home-stalls; apparently there is not a labourer's house in all the country; all metaying farmers.

PARMA.

PARMA.

Appearances from Reggio to this place are much inferior to those from Modena to Reggio; the fences not so neat; nor the houses so well built, white, or clean. All here metayers; the proprietor supplies the cattle, half the seed, and pays the taxes; the peasant provides the utensils. In the whole duchies of Parma and Piacenza, and indeed almost every where else, the farms must be very small; the practice I have elsewhere noted, of the digging the land for beans, and working it up with a superfluity of labour, evidently shew it: the swarms of people in all the markets announce the same fact; at Piacenza, I saw men, whose only business was to bring a small bag of apples, about a peck; one man brought a turkey, and not a fine one. What a waste of time and labour, for a stout fellow to be thus employed.

SAVOY.

All the peasants are proprietors. So long ago as the year 897, lands were let on lease for twenty-two years, and not only for a payment of fruits or service, as in all the northern parts of Europe, but partly at a money-rent. This shews how vastly more forward Italy was in those early periods, than the rest of Europe*.

It is said, that in 1464 began the custom of letting lands on a three years lease†.

SECT. V.—RENT AND PRICE OF LAND.

This, as I have endeavoured to explain already, in the case of France, is one of the most important inquiries in rural œconomy. The vulgar notion is, that nothing raises the value of land, but trade or manufacture. If the result of my travels, were only to produce facts sufficient to overturn so false a theory, my time would not be altogether lost.

PIEDMONT.—*Chentale*.

Land, in general, is sold at 800 liv. or 900 liv. the *giornata*, which is to the English acre as 7440 is to 7929. (*Paucton*). At a distance from towns, 600 liv.

* ————Uncerto Donno, che cerca da P Abate di S. Ambrogio a nomo di livello, per ventidue anni, alcune terre nel Contado di Brescia, ch'erano del monistero d'Orona; promettendo di pagare a fisco cioè per fissa annuale pensione tanta quantità di generi, e di denaro. Secala modia decem, Seligine staria duodecem, faba, &c. &c. Giulini goes on; "Qui chiaramente si comprende, che s'ingannò il Mattioli il quale credette, che la segale fosse la filigine degli antichi." *Memorie della Città e della Camp. di Milano*. Giulini, parte ii. p. 62.

† Caronelli sopra l'Instituzione Agraria della Gioventù. 4to. 1789: P. 58.

to 850 liv. Some at 1000 liv. (53l. 6s. per English acre.) Good watered meads, 1000 liv. to 1200 liv.

Turin.

The price of land in the environs of Turin, as may be supposed, is very high. Four miles from the town, some is sold, without water, at 1200 liv. the giornata: with water, it depends on quantity, and the value is immense. Land that has one hour a week of such a stream as will water five giornate in that hour, sells at 1500 liv. (79l. 19s. per English acre); if it waters two giornate, 1000 liv.; and if three, 1200 liv. And such watering adds, at least, one-third to the value of the land. At Cambiano, five miles from Turin, arable land sells at 3000 liv. but this is uncommon. Near the town, such prices as 3000 liv. and 4000 liv. are known. But, in general, arable watered, near Turin, sells at 1000 liv.; at a distance, and not watered, 200 liv. to 550 liv. If a general average were to be made, of all sorts of land, except the very finest, it would be about 500 liv. In regard to rent, but little is let for money; chiefly at one-half produce; but such meadows as would sell at 1000 liv. would let at 70 liv. to 75 liv. If two-thirds are arable, and one-third meadow, 40 liv. will be about the rent in good lands. In the territory of Turin, arable lets at 30 liv.

Vercelli.

Rice-grounds, 500 liv.; good wheat land, 800 liv.; watered meadow, 600 liv. and 700 liv. per giornata.

MILANESE.

The price varies from 15 liv. for the poorest wastes, to 1000 liv. the pertica*; but from 600 liv. to 1000 liv. more common. As the livre is $7\frac{1}{2}$ d. English, 1000 liv.

* The difficulty I have met with, in ascertaining the contents of a Milanese pertica, is strange. Paucton, in his *Metrologie*, makes it to the English acre, as 0.14727 is to 0.7929, by which proportion, it should contain 8090 feet, or about 5 1-3d perticas in an acre. Count Alexander Cicogno, in the Memoirs of the Patriotic Society of Milan, vol. ii. p. 304, says, that if seeds are planted at fifteen oncie one from another, 1479 will plant a pertica. As the oncia is two inches English, this makes 9243 English feet in a pertica.

Monf. de la Lande says, that it takes more than five perticas to make an arpent de Paris: now as that arpent is to the English acre, 0.6694 is to 0.7929, there are consequently 36,775 English feet in that arpent; at five perticas, it would consist of 7355 English feet, or about six to an acre.

In the notes to the new edition of the *Venti Giornata* of Gallo (1775), this pertica is said to contain 6152 French feet, which will not differ materially from De la Lande.

Count Carli, who was president of the supreme council of Finances at Milan, and has written intelligently on the *enfimento*, says, *L'arpent di Francia sta alla pertica Milanese come 1½ ad uno prossimamente.*

1000 liv. is 98l. 19s. 2d. per acre. It is usually bought in such a manner as to pay $2\frac{1}{2}$ to 3 per cent. for the purchase-money.

Between Milan and Pavia, land rendered good by water, some sells at 300 liv. to 500 liv. : at 300 liv. it lets at 12 liv.

From Milan to Mozzata, when you have passed the watered plain, which is in a few miles, the rent, in general, is not more than 4 liv. or 5 liv. the pertica. In every new lease, for a long period, such as eighteen or twenty-one years, there is always an augmentation of rent in every part of the Milanese, and generally to a pretty considerable amount. There is also an undoubted augmentation in the specie current in the country; and the prices of every thing have risen at the same time that money has increased. It highly deserves noting, by the politician, that as the Milanese subsists entirely by land produce, without trade (other than the sale of that produce), and without manufacture, it is remarkable that it has experienced an advance in its prosperity, as well as countries that seem to engross both trade and manufacture; even at a period long after it had attained a height of cultivation and improvement, to which those trading countries have little to oppose.

Lodi.

The best land near this place, 600 liv. the pertica (59l. 8s. per English acre); but farther off, 300 liv. to 350 liv. The *Spina*, a farm I viewed, belonging to the Caval. Don Bassiamo Bona Noma, lets at 30 liv.; others at 25 liv.; but the common price 12 liv. to 15 liv. The best land and highest rent is all for cows.

Codogno.

Watered lands sell at 300 liv. the pertica; and let at 10 liv. (19l. 9s. per English acre), nett rent, tenant paying censimento, &c.

mente. (Delle opere del S. Conte Carli. 8vo. 1784. Tom. i. p. 223.) The arpent of France being to the arpent de Paris as 48 to 32, there are 55,162 English feet in it, and in the pertica (at $1\frac{1}{4}$ to 1) 31,500 feet. But the same author says (p. 320) there are 4868 pertichi in a square Italian mile; if so, there are 3628 in a square English mile; this makes $5\frac{1}{2}$ and 1-6th pertichi to an English acre.

Finding so many contradictions, I judged it necessary to recur to different authority. The *uncia* of Milan is two English inches; and the measures thus arrange themselves.

- One pertica 24 tavoli.
- One tavola 12 piedi.
- One piede 12 oncie.

Of these the tavola and pertica are square measures, the former containing 12 piedi square; this makes 576 English feet, which, multiplied by 24, the result is 13,824 feet for a pertica, or about 3 1-6th to an acre; and by this estimate I shall calculate.

Rent

	<i>liv.</i>	<i>s.</i>
Rent nett,	10	0
Water-tax for distribution,	1	0
Cenfimento,	2	5
Total rent,	13	5

VENETIAN STATE—*Bergamo.*

Price of land near Bergamo, 80 ducats the pertica. The ducat is 8 liv. and 50 liv. the pound sterling; and, if the editors of Agostino Gallo be not mistaken, there are 6194 French feet in a pertica; on these proportions, land sells at 78l. 8s. per English acre.

Brescia.

The best sells at 800 scudi; commonly from 300 to 500 scudi the jugero. This measure containing 4 pertichi, and the English acre $4\frac{1}{4}$, makes 400 scudi to equal 59l. per English acre, at 7 liv. the scudo. The best land, of 800 scudi, amounts consequently to 118l. Rents, per jugero, 5 to 10 scudi; the mean, $7\frac{1}{2}$ scudi, equals 22s. English acre.

Verona.

Land here commonly sells at 70 zecchini the campo (44l. 6s. per English acre), and yields to the proprietor 3 to 4 per cent. I viewed an arable field close to the city, yet sowing with wheat, that would sell for 100 zecchini per campo: and some other lands, just out of the Porta Nuova, that are excessively gravelly, would sell for 15 zecchini; such poor land, at a distance, would not sell for more than 8 or 9 zecchini (5l. per English acre): it is, however, not so bad, but that good mulberry-trees are on it.

Vicenza.

The best watered meadows sell at 2400 liv. to 3000 liv. the campo, which is about 65l. per English acre; the best arable is nearly as valuable. The worst arable 300 liv.: in the best there are neither mulberries nor vines. Common price 900 liv. to 1000 liv.; and the produce 110 liv. per campo, about 55s. the acre. The highest rent in money is 3 zecchini the campo; common 1, $1\frac{1}{2}$, or 2 zecchini. But, in general, land is let at half produce.

To Padua.

The best land sells at 45 zecchini the campo: rice-grounds are at that price.

Padua.

The best arable land sells at 200 ducats, of 6 liv. 4s. The campo is 840 per-tiche quadrate, each of 6 feet, consequently 30,240 feet; but the foot is 1 inch longer than the Paris foot: it is, therefore, equal to about 35,280 Paris feet *, or about $\frac{1}{16}$ th under an English acre. Middling land, 95 ducats; bad, 50 ducats; rice-grounds, and consequently irrigated, 200 ducats; the same land, before rice being planted, 100 ducats; watered meadows, 200 ducats; woods, 100 ducats; gardens, 400 ducats. Estates pay 5 per cent.

ECCLESIASTICAL STATE—*Bologna.*

Landlords are paid by half produce, which affords them about 11. 6s. 5d. per tornatura, of half an English acre, and as much is left for the farmer: this is about 51. 5s. an acre, gross produce, on an average; but it is in the rich plain only. Through all the country, and including good, bad, and indifferent, it varies from 8s. 9d. to 26s. 5d. the tornatura, for the landlord's share. The price for such land as yields the latter sum, is 21. 17s. 6d. English, the tornatura: in general, from 81. 15s. to 131. 2s. 6d. The return for the value of land is 4 to 5 per cent. on the capital; but in farms on the mountains, 7 per cent.

TUSCANY—*Florence.*

The landlord's half of the produce, for all farms are let *a la metà*, is about 3 liv. nett (2s. 1½d.) per stiora on the plain (11s. 8½d. per English acre) †: it is 2 liv. on the hills (7s. 8½d. per acre), and 1 liv. on the mountains. No other proof is wanted of the poor state of agriculture in this country, arising, doubtless, from so wretched a mode of letting land. What must it have been before the time of Leopold, who has done so much towards the annihilation of its old shackles?

Villamagna.

Three poderi, containing 200 stiori cultivated, and 283 of mountain wood, would sell at 12,000 scudi (3400.1); and, per stiora, for the whole, 71. each: it also yields a rent, by metaying, of 500 scudi; and land is commonly sold to pay 3½ per cent. interest; but, more commonly, in other parts, only 3.

DUTCHY OF MODENA—*Modena.*

The biolca, which is here the measure of land, is 29 French toises, by 26. or 754; or, to the English acre, as 27,144 is to 38,300; or as 15 to 21. This

* Mr. Paucton makes it more than an arpent of France, 1,0866. How he proves this, I am not arithmetician enough to know.

† This at the ratio of 5½ stiori per acre.

measure of arable sells from 500 liv. to 1200 liv.—the livre half that of Milan, or about 4d.; 800 would be 18l. an acre. Watered meadow sells at 1200 liv. to 3000 liv.; the latter equals 70l. an acre. Such are mown thrice; the first cutting yields 1 carro, of 100 poid, or 2500 lb. (the pound about $\frac{1}{4}$ ths of an English pound); and the price of hay 3 to 4 zecchini per carro.

PARMA.

The best land sells commonly at 50 zecchini the biolca (31l. 7s. per acre). To Firenzuola, the best sells at 25 to 40 zecchini.

PIEDMONT—*Vogara*.

From St. Giovanni to Vogara, the price of the best is 500 liv. the journal. After that town, 24 scudi di Milano per tavola (about 20l. to 25l. per acre). From Vogara, to within a few miles of Turin, the average value of land is 500 liv. (26l. 13s. per English acre.)

SAVOY.

At Montmelian, vineyards set at 1000 liv. to 1200 liv. the journal, which about equals a French arpent. On the mountain sides to Chamberry, on a soil, to appearance, absolutely stones, that yield good wine, and sell as high as meadow. Cultivated land, at Modena, in the Haut-Savoy, at 1000 liv. Improved mountain spots, 300 liv. to 500 liv.

The most careless examination of the preceding prices, will be sufficient to shew, that land is sold, at present, in Lombardy, some ages after it has lost both its commerce and its manufactures*, at prices that ought to mark the direct influence of immense industry; for it rises from 30l. to 100l. an acre, through a territory not comparable for soil, naturally to many others. I will venture to assert, that the same *land* in England, would not sell for half, perhaps, not for one-third of the money. And it is worthy of remark, that the cities which possess most trade at present, as Leghorn, Genoa, and Venice, have little influence on the lands which sell at the prices here noted. It is not the competition of Venetian merchants that raises the prices on the *terra firma*; and what have those of Leghorn and Genoa to do with the Milanese and Piedmont? If Leghorn has not cultivated the Maremma, how was it to water the Lodizan?

* Every one knows, that, strictly speaking, there are both trade and manufactures in all parts of Lombardy; converting *raw* to organized silk, is certainly a manufacture; and making a few velvets at Genoa, or glass beads at Venice, are manufactures; but, for all the purposes of argument, Lombardy, when compared to such countries as England and France, must be said to be almost destitute of them.

Bologna is, parhaps, the most manufacturing town in Lombardy; but has it drained the Commachio? If you recur not to present, but to antient wealth, you must turn to Florence*, Pisa, Genoa, and Venice; the two first are in one of the worst cultivated countries in Italy; of Genoa I know nothing, but by reading; but I have read no author that speaks of great cultivation in the Ligurian territory, *free from small present proprietors*: and let it be remembered, because it is a circumstance that merits it, that great commerce and fabrics, especially when depending on a city that governs a territory, have a direct tendency not to establish, but to annihilate such properties.

The effect of great wealth, flowing from industry, is to extirpate little properties, by the profits from trade being invested in their purchase; one country-gentleman, with half a score farmers, and a hundred labourers, takes the place in countries, where the progress of wealth is in its natural course, of a number of little proprietors, who eat up all their produce, and yet are half starving for want. Is this the case in the Genoese territory? I am sure it is not at Venice.

The surest proof of the want of disseminating wealth in the country, is the almost universal practice of cultivating the land by metayers; if trade and commerce did much for Italy, which cannot be doubted, you must look for their effects, not in the country, but in towns. Those cities that possessed much industry (which I have named), carry sure proofs of former prosperity: go out of their gates, and you meet with none—from what did this arise? Probably from those cities being *sovereign* ones, and shackling the country with every species of monopoly, in favour of themselves. What is it, therefore, that will diffuse wealth through all the classes, and give verdure to the fields, as well as lustre to the towns? An equitable government. Whatever we possess in England, we owe to this origin; and it highly deserves notice, that it is not a cultivation superior to that of other countries, which distinguishes our island so

* For the immense manufactures and wealth of Florence, in the fourteenth century, see Giovanni Villani, lib. ii. cap. 93. “*In Firenze le Botteghe (anno 1330) dell’arte della lana erano dugento e più e facevano da settanta in ottanta mila panni di valuta di più di mille dugento migliaia di fiorini d’oro (sono a scudi fiorentini 22,860,000) che bene il terzo e più rimaneva nella terra per ovraggio senza il guadagno de’lanajuoli. Del detto ovraggio vivevano più di 30,000 persone. Se per tutti i prodotti e manifatture dell’intera Toscana presentemente non entra più di un milione due centomila scudi; chiaro è, che tempo fa la sola arte della lana in Firenze produceva venti volte più utile di quello, che presentemente ne faccia tutto lo stato. Carli Saggio Sopra la Toscana, op. i. p. 348.*”

A most singular law passed during the republic of Florence, that no man should make proof of nobility, who was not able to deduce it from the manufacture of wool or silk. *Carli*, tomo v. p. 335. A more commercial idea could no where root itself.

much, as the establishment of a race of men generally found no where else; a substantial and wealthy race of tenantry; a race found in every corner of England: in Lombardy, you must go for such, not to Florence and Genoa, but to the Lodizan.

CHAP. II.

Of the Management of Grass Lands.

CATTLE and grass lands are so connected, that, I trust, it will not be deemed an impropriety to treat of them in the same chapter, and as parts of the same subject. The observations I have made in Italy, will be divided easily into—1, irrigation;—2, live stock.

SECT. I.—OF IRRIGATION.

If there be one circumstance which gives a superiority to Lombardy, over all the other countries I have seen, it is this, and therefore merits the most particular detail.

PIEDMONT—*Nice.*

Such is the consequence of water here, that a garden of 4 festaradi (a square of 12 trebucchi, *i. e.* 144 is a festarada, and 400 trebucchi a giornata, which is to the English acre as 0.7440 is to 0.7929), with a small house, lets at 20 louis d'or per annum, or about 15*l.* an acre.

Coni.

For the last ten miles from Nice to Coni, the country improves continually. The soil, near the mountains, is stoney, but is a good sandy loam lower in the vale. It is perfectly level, and watered with the utmost attention, in a manner I had not noticed before; not, as in Spain, in beds, but the field is ploughed flat, sown with wheat, the clods broken with hoes and bush-harrowed, and then great deep trenches struck with the plough, for letting in the water; these are 8 to 12 yards asunder. They are now (September) watering clover 8 inches high, by letting the water into these trenches, and conducting it in a singular manner.

manner. A man walking backwards, draws, by a line, a bunch of straw and weeds, just large enough to stop the water in the trench, and force it to overflow on each side. This is an expensive and operose method, and inferior to the Spanish. The crops now on the ground are maiz; good, but not extraordinary: millet, and a little hemp; the male plants picked. A great deal of clover, but not much that is clean. But meadow abounds, which is the glory of Piedmont; and the conducting of the water, in multiplying conduits, seems well understood, and practised in great perfection.

Coni to Chentale.

In the watered meadows, much *chicorium intybus* and *plantago lanceolata*. Watered meadows are cut thrice commonly; but in some seasons, four times.

Racconis.

The watered meadows are now mowing for a third time; the predominant plants—the *chicorium intybus*, *plantago lanceolata*, *acchillea millefolium*, and *trifolium pratense*.

To Turin.

From Coni to Turin, something more than half the country appears to be watered; possibly two-thirds; and wherever the water is carried, it is apparently with great skill. It is, however, rather singular, that more trenches are not cut for taking the water off the land; the attention is chiefly paid to bringing it on; from which we may conclude, either that the heat of the climate renders such drains less necessary than in England,—or that water is too valuable, from every one understanding its use, to be brought on in the least superfluous quantity. The contrivance, towards Turin, for carrying the aqueducts of irrigation across the roads, are beautifully executed: for convenience of distribution, the water-course is raised three or four feet, or more, above the general level: these aqueducts are brought to the side of the road, and seemingly finish in a wall, but really sink in a syphon of masonry under the road, and rise on the other side, behind another similar wall. Seeing these buttresses of masonry, without perceiving, at first, any water, I wondered, for a moment, to what use they could be assigned; but when I mounted the foot-way, this beautiful contrivance was, at once, apparent. These are noble exertions.

Turin.

The irrigation in all this vicinity, is extensive, and carried to great perfection. Water is measured with as much accuracy as wine. An hour per week is sold, and the fee simple of the water is attended to, with the same solicitude as that of
the

the land. Rich meadows, without water, sell for 1000 liv. and 1100 liv. a giornata; and arable, worth 500 liv. without water, is, in many instances, worth 2000 liv. with it. Such a meadow as will sell for 1100 liv. or 1200 liv. per giornata, will yield, the first mowing, 115 rubbii of hay, worth 9*s.* to 10*s.* the rubbio; the second, 90 rubbii, at 7*s.* to 8*s.* and the third, 80 rubbii, at 6*s.* to 7*s.*; the fourth growth is sold, to be eaten by sheep, at 5 liv. This produce amounts to 120 liv. or 6*l.* English, per giornata, which is under an acre. The interest of 1100 liv. being at 40 liv. or 50 liv. there remains a sufficient profit, after all expences are paid. During the winter, as the meadows are commonly fed with sheep, they do not water at all. Some experienced cultivators avoid watering in the spring, till the frosts are over, which happen here as late as the 10th, and even the 15th of May, as a strong fresh vegetation is, in such cases, entirely cut off; but, in general, no attention is paid to this circumstance; and watering goes on at all times, except when sheep are on the ground. Those who have water enough, let it on to their land once a week, during the whole summer; but if the weather is wet, once a fortnight; and a day or two before cutting, if the water is perfectly clear. In regard to the quality of water, they make no other distinction than that for mountains being cold; and that of the Dora, near Turin, being charged with so much sand as to be bad. They attend to the cutting of weeds in the canals, that they may rot; and some good managers harrow the bottoms in the spring, to foul the water, which then acts more powerfully as a manure. Another practice, which tends also to prove what excellent farmers they are in all that respects meadow-grounds, is that of paring and burning, which they perform on pieces that have a bad herbage, or want of improvement; but do not sow them with corn, or any other plant, except hay-seeds, in order to renew the grass, with no other interruption. It is impossible to praise such practices too much. They call this husbandry *motara*.

The power of effecting the great works in irrigation, which are visible over this whole country, depends very much on the law, which supposes the right and property of all rivers to be vested in the king; consequently all canals taken from them, are bought of him; and this ensures another regulation, which is the power of carrying the water, when bought, at the pleasure of those who buy it, where they think fit; they cannot, however, cut across any man's ground, without paying him for the land and the damage; but the law does this by regulations known to every one, and no individual is allowed a negative upon a measure which is for the general good. The purchasers of water from the king, are usually considerable land owners, or communities that have lands wanting water; and it is of no consequence at what distance these lands may be from the river, whence the water is taken, as they have a right to conduct it where they choose, provided they do not cut through a garden or pleasure ground.

ground. Nor can they carry the water *under* that of others, whose canals are already made, as they might in that case deprive them of a part of their water; they are obliged to throw aqueducts *over* such canals. The benefit of water is so great and well understood, that nobody ever thinks of making objections; and in case their lands are not already watered, it is no small advantage to have a new canal brought through them, as they have the opportunity of buying water of the proprietors. It is sold per hour per week, and even half an hour, and down to a quarter. The common price of an hour per week, for ever, is 1500 liv.—At Gruliascho, four miles from Turin, there are many Persian wheels that lift up the water by buckets; the wheels are double, with washers between for the stream turning them; the buckets or boxes on one out side only; they raise the water 8 or 10 feet, and about $2\frac{1}{2}$ short of the full diameter of the wheel, and I could not perceive that they lose a drop; none falls, except what adheres to the wheel itself. To save the expence of multiplying sluices, for the occasional stoppage of water, in carrier trenches, to force it over the land, they have a moveable board that fits the trench, which is placed occasionally where wanted, and answers the purpose well. They have none of the ramifications of carrier trenches common among us; and not so many drains for taking the water of as with us; and, on the whole, do not shew any thing like our attention in the use of the water, though twenty, or rather an hundred times more in bringing it from rivers, and distributing it about the country; and I could not but observe, that their meadows have much bad herbage, and many places damaged by the water resting too long; this is more the case here than it seemed to be from Coni to Racconis, where the meadows carried a better countenance.

• *Turin to Chivasso.*

Not one-third of this country is watered. At Chivasso but little also. After crossing the Dora Belta, there are soon two considerable canals of irrigation; one made two years ago only, which is as great a work as a navigation in England.

Ciglione.

Little land watered in this country; but I observed here some meadows, with off channels, from the principle ones, for conducting the water, which I did not notice before; but very few drains. The new canal crosses a gravelly waste, but none of it watered.

Trouchan.

A very rich country much watered; and many mulberries.

St. Germano.

Mowing the third crop of grass, and very poor; not more than 15 cwt. an acre, and yet watered. The glory of Piedmont is from Coni to Turin. Those who pass Mont Cenis to Turin, and Turin to Milan, see, on comparison, nothing.

Vercelli.

The new canal, now making, for taking water from the Dora Baita, and conducting it to the rice grounds of Vercelli, is done by the king, and will cost three millions; the water is sold to communities. The other I crossed near the Dora, at the same time, was made long ago, and belongs to the Marquis de Bourg.

MILANESE—*Buffalora.*

After crossing the Tesino, in several branches, and entering the Milanese, we find a great system of watering meadows to Buffalora, where that magnificent canal, the Navillio Grande is 20 yards broad, and though navigable, was originally made for irrigation alone.

St. Pietro Olmo.

Hence, for some distance, there is no watering; but then there is something in our Berkshire method; the lands are arched up, and just in the centre, on their crown, are the carrier trenches for conducting the water, and on each side a row of low fallows; some of these lands are two rods broad, and two feet higher in the ridge than in the furrow; the land firm and the herbage good: wherever the meadows seem good, there is abundance of *chicorium intybus*, *plantago lanceolata*, and *trifolium pratense*.

Milan.

As the irrigation of the Milanese is perhaps the greatest exertion of the kind that ever was in the world, and certainly the first that was undertaken in Europe, after the decline of the Roman empire; it merits every attention that a farming traveller can give; for it will be found, by very briefly recurring to records, which have been searched, that great exertions (perhaps as great as ever known) were made in this country, at a period when all the north of Europe was in a state of barbarism. In the year 1037, mention is made of the canal Vecchiabbia. In 1067, watered meadows were common, called *prato roco*, by Landolfo*. In 1077, there are notes of many streams used. In 1138, the

* *Giulini*, tom. iv. p. 122. 224. 225.

monks of Chiarevalle bought of Giovanni Villano some commons, woods, and meadows for 81 liv. under the contract (a parchment yet remaining) “ut monasterium possit ex Vectabia trahere lectum ubi ipsum monasterium voluerit et si fuerit opus liceat facere eidem monasterio fossata super terram ipsius Johannis ab una parte viæ et ab alia. . . . &c. possit firmare et habere clusam in prato ipsius Johannis, &c.” There is a similar contract of the following year, and various others, until the beginning of the 13 century; from which, and others, it appears, that the Vecchiabbia was the entire property of the monastery, and confirmed in 1276 by the diploma of the Emperor Frederick II. The merit of these monks appears to have been great, for they gained such a reputation for their skill and industry, that they had many applications for assistance in directing works similar to their own upon uncultivated lands; and the Imperial Chancellor Rinaldo, in the time of the Emperor Frederick I. being appointed archbishop of Cologne, found the possessions of his see in such a deplorable state, that he applied for, and found the same assistance, as reported by Cesarior Eisterbacense. Their greatest exertions were in irrigation, which was so well known, that they sold their superfluous water, transferring the use and property of some by the hour, day, and week. In two centuries they came to be possessed of 60,000 pertiche, mostly watered: there is reason to believe that the practice, in the 13th century, did not materially differ from the present modes; because, in the papers of the archives of the abbey of that period, mention is made of *chiuse*, *incastri*, *bochilli*, *foratoi**, and other works, to distribute the water, and regulate the irrigation†. In 1164, the Emperor Frederick gave various rights, in certain rivers, to the people of Pavia, for the purposes of irrigation‡. In 1177, the people of Milan enlarged and continued the Navillio Grande, from Abbiate Grasso to Milan, being 14 miles; it was brought from the Tesino, near the Lago Maggiore, to Abbiate Grasso, 20 miles, by the people of Pavia, long before the date of any records now known to remain§. In 1271, it was made navigable. It is thirty-two Italian miles long, and twenty-five braccia wide, or forty-nine English feet. ||

The second great work, was the canal called Muzza, which takes the waters of the Adda, at Cassano, and carries them to Marignano, there dividing and

* *Chiuse*, are sluices; *incastri*, are water gates, that are moved perpendicularly; *bochilli*, openings in the banks to distribute water; *foratoi*, discharges for carrying off superfluous water; the same as *scaricatori*.

† *Memorie Storica ed Economica sull'Irrigazione de Prati. Don. Ang. Fumagalli Atti di Milano*, tom. ii. p. 215.

‡ *Giulini*, tom. vi. p. 330.

§ *Nuova Raccolta d'Autentiche trattate del moto dell'Acque. Parma. 1768. 4to. Tom. vii. P. Prifi. p. 97.*

|| *Ibid. p. 98.*

watering much of the Lodizan. It was executed in 1220*, and done in so admirable a style, that Padre Frisi, in the preface to *Modo di regolare i fiumi, &c.* says,—“il meccanismo d'irrigar le campagne è stato ridotto all'ultimo grado di maestria e di perfezione nel canale di Muzza†.” And Padre Antonio Lecchi, another great engineer and mathematician, remarks,—“De'nostri trè celebri canali di Muzza, e de'due navigli qual altra memoria ci rimane ora, se non se quella del tempo della loro costruzione, e d'altre poche notizie, niente concernenti al maraviglioso artificio della loro condotta‡.”

In 1305, the canal of Treviglio was made, which takes the water from the Brembo, and carries it, for several miles, about twenty-five feet wide, and about three deep; it irrigates the territory of Triviglio and the Ghiara d'Adda. And, within four or five miles, there are five canals, taken from the Adda and the Brembo, all of great antiquity. In 1460, the canal de Martesano was begun, under Duke Francis Sforza I.; it was twenty-four miles long, and eighteen braccia (thirty-five English feet) wide; since lengthened seven or eight miles more. It takes the waters of the Adda, a little before Trezzo, by means of a powerful wear (*chiuse*) founded upon the living rock; it is then supported for five miles by a solid wall of stone, forty braccia (eighty feet) above the bottom of the Adda, and parallel with it. At Gorgonzola, it passes over the torrent Molgora, by a bridge of three stone arches. At Carsenzago, it is crossed by the river Lambro, which enters and quits the canal with all its floods. And, in order to prevent the surplus of water, which this circumstance occasions, from breaking the banks of the canal, or overflowing them, there are nineteen scaricatori in the canal, above, below, and facing the junction, which are so calculated, that they have not only powers sufficient to take off the waters of that river, but also half of those of the canal itself. These scaricatori are canals which take the water, when sluice-gates are opened for that purpose, and convey it, at various distances, to the Lambro again; the fall in its course being considerable enough to free the canal from all superfluity of water. Near Milan, this Navillio receives the torrent Seveso; and, after surrounding the city, unites with the Navillio Grande and the Olona. The sluices which Bellidor supposed to be invented by the Dutch, were used, for the first time, near Padua, in 1481, by two engineers of Viterbo, Dionisius and Peter Domenico, brothers §. Leonardo da Vinci profited immediately of this great invention, for

* Verri, Storia di M. t. i. p. 240.

† Nuova Raccolta, tom. vii.

‡ *Ib. Piano, &c. de tre torrenti*, p. 141.

§ *Moto dell'Acque*, vol. v. Parma, 1766, p. 359. Mentioned by Zandrini in the tenth chapter, *Sopra l'Acqua Corrente*. This is the common supposition in Lombardy, and is thus recorded; but it appears to be an error, by a passage in *Giulini*, tom. xii. p. 332, where, anno 1420, mention is expressly made of them, *machinarum quas conchas appellant, &c.*

the union of the two canals of Milan; and finding between them the difference of the levels to be eighteen braccia *, he, with six sluices, in the year 1497, under Ludovico il Moro, opened and facilitated the navigation from one to the other. The greatest *scaricatori* † of the waters united at Milan, is the canal of Vecchiabbia, which, after having served some mills and irrigation, falls into the Lambro near Marignano; and if this canal were made straight, and supported by some sluices, the navigation might be continued to the Lambro, and thence to the Po and the sea. Both these canals, the Grande and the Martesano, are so contrived, as to be completely emptied once a year, for cleaning and repairing whatever accidents may have happened to any of the works.

I have entered into this digression upon a very curious subject, little known in English literature ‡, in order to shew how well irrigation was understood, and how admirably it was practised, when the countries on this side of the Alps were barbarous. At the same time, however, that justice is thus done to these great exertions, we must bear in mind, that few districts in Europe are better, or so well, situated for irrigation. The lakes of *Maggiore* and *Como*, nearly upon the same level, are three hundred feet (one hundred and fifty braccia) higher than Milan,—and that of *Lugano* two hundred feet higher than those, with a nearly regular declivity to the Po §.

There are authors who have asserted, that agriculture is improved in consequence of great trade or manufactures only; but the instance of the immense irrigation in the Milanese, effected by these and many other canals, too numerous to mention, will not allow of such a conclusion being general; and to shew that my opinion is not without foundation, a very brief review of the state of Milan, so far as it respects these periods, will not be displeasing to a reflecting reader.

In 1177, when the canal de Navillio Grande was made, the republic of Milan had been gradually forming for about two hundred years ||; but these dominions were exceedingly confined;—Lodi, Pavia, Mantua, Verona, Crema, Tortona, Como, Bergamo, Brescia, Piacenza, Parma, Genova, Asti, Vercelli,

* P. 98. *Frisi*.

† The *scaricatori* are what I believe we call weirs in England; they are discharges of superfluous waters. Mr. Brindley made them, in the Duke of Bridgewater's canal, circular, and in the centre of the river, to convey the water, as into a well; but in Italy they are cuts or openings in the banks of the canal, at places that allow a quick conveyance of the water; for instance, where a canal crosses the bed of a river: their powers are calculated with such a mathematical exactness, proportioned to the quantity of water brought into the canals, by the rivers joining them, that no floods ever effect the surface, which is of an equal height.

‡ One would naturally look for some knowledge of these facts in *Anderson's Deduction of Commerce*; but we shall look in vain.

§ *Verri, Storia di Milano*. 1783. Tom. i. p. 5.

|| *Storia di Milano*. P. Verri. 4to. 1783. Tomo i. p. 142.

Novara, Cremona, Ivrea, Padua, Alba, Treviso, Aquileia, Ferrara, Reggio, Modena, Bologna, Imola, Cesena, Forli, Rimini, Fano, and Ancona,—were, at that time, independent republics*; which united against Milan, in 1162, with the Emperor Frederick I. and besieged and destroyed it. This singular fact that in fifteen years after one of the most signal destructions that could be brought upon a city, there should be found energy enough in a petty republic, to undertake a work which is, in the present age, regarded as an honour to Lombardy, must be admitted as a proof, that the trade and manufactures of that period could have been but very inconsiderable.

Milan, however, unquestionably arose to great power and prosperity; and our business is to inquire into that period, whence we may judge how much its commerce might influence the perfection to which she has carried her agriculture.

- 1042, Civil war; the nobility driven out by the people.
- 1056, The government changed.
- 1067, Meadows watered. *Guilini*, IV. 122.
- 1108, War with Pavia.
- 1111, Lodi destroyed by Milan
- 1127, Como destroyed by Milan.
- 1153, Frederic Barbarossa interposes.
- 1162, Milan taken and destroyed.
- 1167, The people of Milan living in tents and cabins. To,
- 1183, War with Frederic
- 1177, Navillio Grande continued to Milan.
- 1191, Grant of waters to Pavia, for irrigation, by the Emperor Henry VI.
- 1204, The nobility expelled.
- 1210, The archbishop's revenue 80,000 fiorini d'oro, equal to 10 millions of livres now.
- 1216, A woollen manufacture.
- 1220, The canal of the Muzza made.
- 1221, The archbishop and nobles expelled.
- 1237, War against the Emperor Frederick II.
- 1240, Government reduced to pay in paper money; the origin of all that has passed since in Europe.
- 1257, The nobility expelled.
- , The Navillio Grande begun to be made navigable.
- 1263, Factions of the Guelphs and Ghibellines now in full activity at Milan.
- 1271, The Navillio Grande navigable.

* Verri, tomo. i. p. 175.

- 1277, Civil war;—Torians and Visconti.
 1281, Ditto.
 1288, Milan buys wool from France, Flanders, and England.
 1296, Decree, that gave to every one the power of conducting water across all great roads, provided stone bridges were erected.
 1302, Revolution;—the Torians get the better of the Visconti.
 1305, Canal of Treviglio made.
 1310, Revolution; the Visconti prevail.
 1327, Violent factions of the Guelphs and Ghibellines.
 1332, Grant of water for irrigation to the people of Treviglio.
 1350—1385, Tyranny of the Visconti drives away the manufactures.
 1395, Great Power of Milan over the cities of Lombardy.*
 Through every part of the 14th century, the passages in the Annals are numerous which prove how well irrigation was understood, and how highly canals of water were valued.
 1421, Milan exports cloths to Venice.†
 1457, Most of the conquests of Milan lost.
 1460, Canal de Martesano made.
 1481, Sluices invented at Padua.
 1497, Leonardo da Vinci joins the canals at Milan.

It should seem, from this detail, that the exertions in irrigation were almost purely agricultural; the benefit enjoyed by the people of Pavia, from the Navillio Grande, was a constant proof of the advantages to be derived from similar canals; and they were executed at moments which will not allow us to attribute them to the influence of manufacturing or commercial wealth.

* In 1378, Giovanni Galeazzo Visconti Conte di Virtù was declared Duke of Milan, his dominions then comprising Arezzo, Reggio, Parma, Piacenza, Cremona, Lodi, Crema, Bergamo, Brescia, Verona, Vicenza, Feltro, Belluno, Bassano, Bormio, Como, Novara, Alessandria, Tortona, Vercelli, Pontremoli, Bobbio, Sarzana, Pavia, Valenza, Casali, Padua, Alba, Asti, Bologna, Pisa, Siena, Perugia, Nocera, Spoleto, and Assisi. *Verri.* p. 417.

† As this woollen manufacture is said to have been in the hands of an order of friars, the *frati umiliati*, we have no reason to suppose it an object of great consequence; the expressions seeming to imply its magnitude being applicable to a comparison with poorer neighbours. Count Giulini says, on occasion of its being carried from Milan to Sicily, “*che tanto fioriva fra noi*,” (tom. viii. p. 585;) but records do not explain the extent; though we are told that they worked up wool from France, Flanders, and England, in 1288 (tom. viii. p. 399.); which trade had existed to some degree of consideration in 1216. Count Verri uses the expression—“*lavoro de pannilani la quale formò la ricchezza cospicua di Milano*,” (*Storia di Milano*, tom. i. p. 357.) But it was Venice, Genoa, Pisa, Amalfi, and Ancona that had the empire of the sea, which gave that author reason to say, “*che tutto il commercio dell’ Europa era presso gl’ Italiani*,” (tom. i. p. 465.)

To this may be added, that during the thirteenth and fourteenth centuries*, Italy was the perpetual scene of bloody wars: the Venetians and Genoese, the Venetians and the Milanese, and, in their turns, the other republics, seem to have had no other business than that of cutting each other's throat. A perpetual state of warfare, and so many revolutions as were taking place in the governments of the Italian cities, were little adapted to give a security of possession essentially necessary to the establishment of such manufactures and commerce, as shall, by the overflowing of their surplus, ameliorate the agriculture of a country.

It was but fifteen years after the destruction of Milan, that the Navillio Grande was made; and within three years after the loss of all her conquests, that the canal de Martesano was digged: these great undertakings were, therefore, executed at periods when commercial prosperity could least of all effect them. There was no stability in that prosperity. It is also to be remembered, that throughout this period of Milanese history, that people, even at the height of their power, were never masters of a commercial sea-port. It is true, that they twice took Genoa; first in 1353, but kept it for a very short time; and again in 1421, when they were in possession of it but fourteen years; and amongst all the dominions of Galeazzo Visconti, Sarzano was the only port, and that never a commercial one; thus the fabrics of Milan were obliged to be exported through the Venetians or the Genoese, who laid duties on the transport of their commodities.

The conclusion of the whole seems fairly to be, that we are not to attribute the irrigation of the country to wealth derived from foreign commerce; the fertility and excellent management of the lands supported a great population, which proved as industrious as public calamities and confusions would allow; but it does not appear that this industry was ever continued through a long series of peace and happiness.

An other idea has been started, that Lombardy owed her irrigations to the effect of the crusades; that the mad enthusiasts, who went upon those expeditions, brought home with them the art of cutting canals, for this most beneficial purpose; but history does not give sufficient lights to allow of this conclusion. I have already remarked, that the Navillio Grande was made by the people of Pavia, long before those of Milan made the cut to that city; and so long before, that no records in the archives were found of it by that most

* In the preceding periods it was probably worse. Count Verri observes, "Dello stato della popolazione nel decimo secolo—mi pare verosimile che dovesse essere mediocrementemente popolata Milano. Le terre erano coltivate parte da servi e parte da liberti. Molte parti del ducato era bosco. In qualche luogo, che ora si coltiva forse, ancora v'erano delle acque stagnanti." *Storia di Milano*, tom. i. p. 76.

industrious searcher into antiquity, Count Giulini. This fact seems nearly decisive; for the first crusade did not commence till 1096, nor terminate till 1100, before which period there is every reason to suppose, the canal in question was cut as the researches of Giulini go so far back as 773. The crusades ended in 1291; and, had the effects been as great as possible, yet they cannot be imagined to have taken place immediately; it must be, after much consultation and long reasoning, that whole towns could be brought to co-operate in the execution of such plans for the common good, from mere reports of the effect in distant countries and different climates. Another circumstance, tending to prove that irrigation in Lombardy was much more antient than the crusades, is that Theodoric, who began to reign in Italy, anno 493, publicly rewarded an African who had come thither, in order to instruct the Italians in the art of irrigating lands, as Mr. Professor Symonds has explained, with his usual elegance, in his most agreeable paper on the effect of water in the agriculture of Italy*. Now if this art had been thus introduced, or, more properly speaking, revived in Italy above six hundred years before the crusades were thought of, there cannot be much reason for attributing that improvement to the observations of those frantic enthusiasts. It is remarkable, that Count Verri, in his History of Milan, says, he had long conceived, that their irrigations were to be ascribed to the Crusades; but, from paying more attention to the authorities quoted by Count Giulini, he gave up that opinion, and concurred in the idea of a greater antiquity†: for which also P. Frisi seems to contend, when he says expressly, that the canal made by the people of Pavia was more antient than 1177‡.

And here it may be worth remarking, that Pavia was the capital and residence of Theodoric, whence there results, at least, a presumption, if he sent to Africa for a person to instruct the Italians in irrigation, that here was the field of his exertions; and that this very canal was the work of that sovereign, not the less celebrated for thus laudably applying himself, in a barbarous age, to works that would do honour to the politest.—But to return from this long digression.

The same law that has been so effectual in watering Piedmont, operates here also, and has done even greater things. He who discovers a spring, conducts

* Annals of Agriculture, vol. i. p. 421.

† *Storia di Milano*, tomo i. p. 354.

‡ Con tutte questo però, se imparzial mente si vorrà avere riguardo al tempo, alle circostanze, alla maestria del lavoro, il naviglio di Milano che forma la comunicazione del Tesino, e dell'Adda, potrà passare per il capo d'opera, che abbiamo in questo genere. Per quanto dice il Sigonio nel libro 14 del regno d'Italia all'anno 1179, pare che il primo tronco dello stesso Naviglio, del Tesino ad Abbiate Grasso, fosse già dai tempi più antichi incominciato e finito dai pavesi per irrigare le vicine loro campagne. Fù nell'anno 1177 che i Milanesi condussero lo stesso cavo da Abbiate a Corsico, e a Milano. *Nuova Raccolta*, vol. vii. p. 97.

it where he pleases, paying a fixed compensation * for cutting through the properties of others. All rivers belong, as in Piedmont, to the sovereign, who sells the waters to speculators for this most beneficial purpose of irrigation. In the distribution of it, by sale, they do not measure by the hour, as in Piedmont, but by the ounce; 12 oz. are a braccio, or 22 inches: an ounce of water is a stream that runs one braccio long and one ounce deep; and the farther the water has run, the higher is the price, as being more charged with manure.

As an example of the beneficial influence of this law, I was shewn, between Milan and Pavia, a spring that was discovered two miles from the lands of the discoverer, the properties of many persons lying between him and the spring. He first bought the property of the person in whose land it was situated, which was easily done, as it was too low to be there of any use; then he conducted it by a trench at pleasure the two miles, paying the fixed price for cutting through his neighbours lands; and, having gained it upon his own, presently changed poor hungry arable gravel into a very fine watered meadow.

Near Milan, a watered meadow sells at 800 liv. the pertica (32l. 15s. the English acre); and the rent of such is about 30 liv. (11. 5s. the English acre.) This must not, however, be classed high; for there are lands that rise to 4000 liv. (163l. the English acre.). In land at 800 liv. or 1000 liv. water often makes half of the value; that is, the rent to the owner of the land will be 15 liv. to 20 liv.; and as much to some other person for the water.

In viewing a great farm, six or seven miles from Milan, in the road to Pavia, I found that all the watered meadow was mown four times; and that what was watered in winter, *prati di mercita*, five times. Such is the value of water here, that this farm, which watered is rented at 20 liv. the pertica, would not let at more than 6 liv. without water, the soil being gravel. The irrigation of the *mercita* begins in October, and lasts till March, when it is regulated like all other meadows. All in general begin in April, and last till September; and if there be no rain, once in seven to fifteen days. An ounce of water, running continually from the 24th of March to the 8th of September, is worth, and will sell for 1000 liv. When arable crops want water, it is always given.

Milan to Mozzata.

Every considerable spring that is found, becomes the origin of a new canal. They clear out the head for a basin, and sink casks, by way of tunnels, for the

* These laws, relative to the conduct of irrigation, are as old as the republic of Milan; first compiled into a collection of statutes and customs in 1216 (*Verri*, p. 239.) They were revised and collected, by order of Charles V. and are in full force to this day. *Constitutiones Domini Mediolanensis Decretis et Senatus Consultis. Gab. Verri. Folio, 1747. De aquis et fluminibus, p. 168.*

water to rise freely, and without impediment from mud or weeds. There are usually three, four, or five of these tunnels, at the bottom of a basin of twenty or thirty yards.

Milan to Lodi.

Of all the exertions that I have any where seen in irrigation, they are here by far the greatest. The canals are not only more numerous, more incessant, and without interruption, but are conducted with the most attention, skill, and expence. There is, for most of the way, one canal on each side of the road, and sometimes two. Cross ones are thrown over these, on arches, and pass in trunks of brick or stone under the road. A very considerable one, after passing for several miles by the side of the highway, sinks under it, and also under two other canals, carried in stone troughs eight feet wide; and at the same place under a smaller, that is conducted in wood. The variety of directions in which the water is carried, the ease with which it flows in contrary directions, the obstacles which are overcome, are objects of admiration. The expence thus employed, in the twenty miles from Milan to Lodi, is immense. There is but little rice, and some arable, which does not seem under the best management; but the grass and clover rich and luxuriant: and there are some great herds of cows, to which all this country ought to be applied. I cannot but esteem the twenty miles, as affording one of the most curious and valuable prospects in the power of a farmer to view; we have some undertakings in England that are meritorious; but they sink to nothing, in comparison with these great and truly noble works. It is one of the rides which I wish those to take, who think that every thing is to be seen in England.

Lodi.

Examining some watered meadows, in high estimation, I found the following plants most predominant, and in the order in which I note them:—1, *Ranunculus repens*; 2, *Trifolium pratense*; 3, *Chicorium intybus*; 4, *Plantago lanceolata*; 5, *Achillea millefolium**; and about one fifth of the whole herbage at bottom seems what are properly called grasses. These rich meadows about Lodi are all intersected by ditches, without hedges, but a double row of pollard poplars; all on a dead level, and no drains to be seen. They are now (October)

* There appeared but few signs of ray-grass, yet it certainly abounds in some of their fields: opinions in Lombardy differ concerning it; Sig. Scannagatta praises it highly (*Atti di Milano*, tom. ii. p. 114); but one of the best writers in their language, Sig. Lavezari (tom. i. p. 82.) wonders rather at the commendations given of it in other countries: he mistakes the French name, it is not *sainfoin*; the *lojessa* of Lombardy, and the *ray-grass* of England, is the *lolium perenne*; the French *sainfoin* is the *medicago onobrychis*.

cutting the grafs and weeds in the ditches, to cart home for making dung. The meadows are commonly cut thrice; but the beſt four times. The produce of hay per pertica, 6 *faſſi*, of 100 lb. of 28 oz. at the three cuts. Price of the firſt, 8 liv. per *faſſi*; of the ſecond, 5 liv.; of the third, 4½ liv. They water immediately after clearing, if there be no rain. Without irrigation, the rent of the country in general would be only one-third of what it is at preſent. In forming theſe watered meadows, they have very ſingular cuſtoms:—all are broken up in rotation; flax ſown for the firſt crop, and their way of laying down is to leave a wheat ſtubble to clothe itſelf; clover is prohibited by leaſe, from an abſurd notion that it exhauſts the land; and that it is not ſo good as what the nature of the ground gives; but on worſe land, the other ſide of the Adda, they ſow clover.

Lodi to Codogno.

All this country the ſame as about Lodi; a dead level, cut into bits of from three to ten acres, by ditches, without hedges, and planted with double rows of poplars and willows, all young, for they are cut as ſoon as the ſize is that of a thin man: here and there one is left to run up to timber. I remarked, in the meadows fed, that the *ranunculus* is avoided by the cows as much as poſſible. I expected, in one meadow, to find it the *acris*, but much of it was the *repens*. All this country is alternately in tillage; ridge and furrow every where: no permanent meadow. After ſeven miles, the road being natural, ſhews the ſoil to be a loamy ſand, binding with rains*.

Codogno.

Thirteen pertiche of watered land neceſſary for a cow; the hay of which is cut thrice and it is fed once; ſuch land ſells at 300 liv. and lets at 10 liv. free from tax. The whole country is ploughed by turns, being down to clover for the cows four years.—1, Flax, and then millet; 2, maiz; 3, wheat and clover; and reſts then for feeding cows; white clover comes, but it is bad for cheeſe. The reader will note, that this opinion differs from that near Milan.

* As well watered as this country is, yet in the ſpring 1779 the ſeaſon was ſo dry, that, where the Lambro enters the Po, men and women croſſed the Po itſelf on foot, as if merely a rivulet; the rector of Alberoni himſelf paſſed it, and the water reached only to his middle. The damage was great every where, but fatal in the Lodizan, where herds of cows were obliged to be ſent out of the country to the paſtured: the miſchief the greater, as from 1774 to 1779 they had augmented their cows 5000, (*Opuscoli Scelti*, tom. vi. p. 56.) The climate has, however, in all ages, been ſubject to great droughts. From May 1158 to May 1159, there fell no rain in Lombardy; wells and ſprings all dried up. The Emperor paſſed the Adige, with his army, near Verona, without boats; and the Count Palatine of Bavaria paſſed thus the Po, below Ferrara. *Giulini*, tom. vi. p. 175.

Codogno to Crema.

Crossing the Adda, from the Lodizan, there is more arable, and much fewer cows.

Milan to Vaprio.

In this line there are some dairies, but not many. Near the city there is much grass, all cut into patch-work of divisions, and planted so as to seem a wood of willows; after that much tillage: though all is flat, and there are no great exertions in watering. But the road passes by that fine navigable canal de Martesano from Milan, which, at Vaprio, is suspended as it were against the hill, twenty feet above the Adda:—a noble spectacle.

Before we quit the Milanese, it will be proper to make a general remark on the conduct of their irrigation, that some evils are observed to attend the practice for want of a better foresight and more attention; particularly from the gradual enlargement of the carrier canals and ditches; they clean them with so much care, for the sake of obtaining the mud, as a manure, that these are every where become too wide for the quantity of water they convey. Sig. Bignami has written upon this point very rationally, in his dissertation *Sull'abuso di scavare i canali delle rogge ed i fossi nel Lodigiano*; where he asserts, that one-tenth part of their lands is occupied by canals and ditches. The evils are numerous; it is not only a considerable loss of land, but it is an equal loss of water, for when an oncia of a given run of water is purchased, there is a great difference between its first fitting a great or a small channel, as in proportion to the size will be the quantity of useless fluid. The atmosphere is also proportionably contaminated; for this great breadth, either of stagnant water, when irrigation is not actually going on, or, what is worse, of mud, in so hot a climate, must be pestiferous; and to this have been attributed the distempers which have frequently made such havoc among their cattle. Another inconvenience is, the greater expence of all erections, bridges, sluices, &c. &c. which are in proportion to the breadth of the channels. The remedy is obvious; it is to forbear all cleansing for the sake of mud; to let all aquatic weeds, and other plants, grow freely *on the banks, edges, and sides* of the canals, and to clear them in the middle only. Such a conduct would, in time, quite choak them up, and enable the farmer to keep his canals exactly to their right width. All these plants covering the spaces, which, in canals often cleaned, are bare earth or mud, would be very beneficial towards preventing and decomposing that noxious, and mephitic, and inflammable gas, always issuing from such mud, which is so pestilential to animals, yet so salutiferous to plants; for mud, covered with plants that are ready to feed on its exhalations, is much less mischievous than

than that which is exposed to the rays of a burning sun. Count Carlo Bettoni, of Brescia *, has practised a method which acts on similar principles; namely, that of burying or fixing willows or poplars to the sides of the rivers whose banks he wanted to preserve, with the precaution only of keeping the ends of the branches out of water; he finds that they grow vigourously in this situation, and, by stopping the mud of the current, form a solid bank; this, on a small scale, might certainly be executed: also in the canals of irrigation, as it has been remarked, by the author already quoted, in the *Atti di Milano*.

VENETIAN STATE—*Vaprio to Bergamo.*

There is a mixture of watered meadow in this line, but the quantity is not considerable. In some which are old, I found a good sprinkling of *trifolium repens*, *chicorium intybus*, and *plantago lanceolata*; but also much *ranunculus* and rubbish. In the plain close to Bergamo, they clean the irrigation-ditches at the end of November, and harrowing them with a faggot, to thicken the water, let it immediately on to their meadows, which is said to enrich them much.

To Brescia.

The Venetian State, thus far, is a considerable falling off from the Milanese, in respect to irrigation; the country is not without canals, but neither the number, nor the importance of them, is to be compared to those of Milan. From Coquillio to Brescia, there are many channels, yet the lands are not half watered.

Brescia to Verona.

The road passes, for some distance, by a very fine canal, yet the quantity of watered land in this route is but inconsiderable. Before we arrive at the Lago di Guarda, there are a few meadows never ploughed, that have a good appearance: but none from the lake to Verona. On the whole, these forty miles, for want of more irrigation, are not comparable to the Milanese or to Piedmont. This route, so much to the north, gives the traveller an opportunity of seeing a chain of considerable cities, and of observing the effects of one of the most celebrated governments that has existed; but a better direction for me, would have been by Cremona and Mantua.

* *Hensleri sul Govern. de Fiumi. Brescia, 1782.*

Verona.

The meadows here are cut thrice, and fed once; are never ploughed, if good and well watered. Water for irrigation here, as in all Lombardy, is measured with great care and attention, by what is called the quadrata, which is a square foot (the Veronese foot is to the English about as twenty are to twelve). Twelve quadrate are sufficient to water five hundred campi of rice-grounds (about three hundred and eighty English acres), and the price of such a quantity of water, is commonly about three thousand *zecchini* (1425*l.* sterling). The wheels in this city, for raising water for irrigating the gardens, are very complete; they receive the water, as in Spain, into hollow fellies. There is one in the garden of the Daniele monastery, for watering about four campi, which are said to yield a revenue of three hundred *zecchini*; which is one hundred *zecchini*, of 9*s.* 6*d.* per English acre. The wheel raises the water about twenty-five feet, receiving its motion by the stream; a low wall crossing the garden, conveys the water in a trench of masonry on its tops; and a walk passing along the centre of the garden, the wall there is open, to admit the path; the water sinking in a syphon, and rising on the other side, to the same height, passes again along the wall, in the same manner as canals are carried under roads in Piedmont, &c. The wheel has double fellies, for giving water on both sides into troughs, which unite in the same receiver, and the washers for giving the motion are placed between the fellies. The whole apparatus, complete, cost three hundred *zecchini*.

To Vicenza.

There are in this tract of country, some perennial meadows watered, quite upon a level, which have a very good aspect: the existence of such should make us question the propriety of the Lodizan system of ploughing, where water is so regularly at command.

Padua.

The country, from Vicenza to this city, is not watered, like many other districts of Lombardy. The practice is very well known; and there are rice-grounds about Padua, but not nearly the use made of water which is found in the Milanese; yet the rivers in the Venetian state belong to the prince, as well as in other parts of Italy, and water is consequently to be bought: but there is not the same right to conduct it at will, and consequently the water itself might almost as well not exist.

To Venice.

In this tract I saw no irrigation, though the whole is very low, and quite level

Venice.

Venice.

The same admirable law, that takes place in the Milanese, for enabling every man to conduct water where he pleases, is found in the Venetian state also, contrary to my information at Padua; but so many forms are necessary, and the person who attempts it, must fight his way through so much expensive litigation, that it is a dead letter, and nothing done in consequence. I was farther told, that it is a principle of the Venetian code, that not only all rivers, but even springs, and rain itself, belongs to the Prince: an idea worthy of this stern and tyrannical government.

ECCLESIASTICAL STATE.—*Bologna.*

I saw no watered lands.

TUSCANY.

I saw no irrigation in Tuscany; and, from the intelligence I received, have reason to believe, that the quantity is not considerable; some meadows, however, are watered after mowing. The best meadows I heard of, are about Poggio, Caiana, Villa Sovrana, ten miles from Florence.

DUTCHY OF MODENA.

The quantity of irrigated land in the Modenese, is but small; it does not amount to more than six biolche in eighty, nor have they more than fifteen perpetual water-mills in the whole territory. From Modena to Reggio, there is a sprinkling of these meadows, the canals for which, taken from the Lecchia, are not large; all, whether watered or not, are manuring, with black well rotted compost, and have a very neat countenance.

DUTCHY OF PARMA.

The country from Reggio to Parma, is not without watering, but the quantity is inconsiderable; there is, in this line of country, a great inferiority to that from Modena to Reggio; not the same neatness nor attention, in any respect; there are mole-casts in the meadows, a thing unseen before; and though there are much cattle and sheep, yet the features of the husbandry are worse. From Parma to Firenzuola, not an hundredth part of the country irrigated, yet there is a good deal of grass, and in some places in large pieces.

PIEDMONT.—*Pavesè, &c.*

For some miles in the Sardinian territories, there are a good many meadows, but very few watered. I passed two small channels of irrigation, but the quan-

tity was inconsiderable. If a map of these countries be examined, there is the appearance of many rivers descending from the Appenines, and falling into the Po, but the use made of them is small. It is remarkable, that all the way by Tortona, Alexandria, &c. to Turin, the quantity of irrigation, till almost close to the last mentioned city, is quite inconsiderable, not one acre, perhaps, in a thousand. What an idea can be framed of Piedmont, by those who pass through it from Mont Cenis, and quit it for Milan or Tortona, without seeing it from Turin to Coni?

SAVOY.

In the mountains of the Alps, by Laneshburgh, &c. they mow their watered meadows once only, but in the plain twice.

From this detail of the irrigation of Lombardy, it must be apparent, that, for want of laws similar to those which take place fully in Piedmont, and the Milanese, and partially in the republic of Venice, no such exertions are ever likely to be made in a free country. We can in England form no navigation, or road, or make any trespass or private property, without the horribly expensive form of an act of parliament; we cannot even inclose our own property, without the same ceremony. Nor is it only the expence of such applications, but the necessity of them generates opposition at every step, and a man must fight his way through country-meetings, through attorneys, agents, council, witnesses, and litigation,—in a manner odious to every liberal feeling, and at a ruinous expence, before he is at liberty to improve his own estate, without any detriment to others; every idea of such works, therefore, in England, as we have seen common in Lombardy, is visionary and impracticable; and we must continue to view, with eyes of envy and admiration, the noble exertions which have been made and perfected in that country, and which, in truth, very much exceed any thing we have to exhibit in any walk of agriculture in this island:—an example to hold up for imitation, and an ample field of practical study.

SECT. II.—OF CATTLE.

PIEDMONT—*Nice to Coni.*

In this part of the Alps, the breed of cows resembles the Alderney, in horn, colour, and size. They are usually cream-coloured, or pale yellow, but with black around their eyes; black tail, and some of them legs also; like the Poictou breed in France.

Turin.

Price of a plough ox, 150 liv. to 300 liv. A good cow, 110 liv.

The method of fattening, in the plain, the cattle called *moggie*, from the mountains of Suza and Buffolino, as given by the Agrarian Society, deserves attention. They begin, by putting them in airy stables, healthy, and well lighted; bleed once or twice; anoint the bodies of the cattle; dress them well at least twice a day; give water mixed with rye-flour; in the evening, feed with a certain mixture called *condut*, composed of elm-leaves, with some hay of the second or third cut, or clover-hay; to which they join a mess of well pulverized walnut-oil-cake: on this mixture they pour some boiling water, well salted, and stir up the whole together; and mixing, at the same time, an eymena of bran, according to the number of *moggie*; the pap, thus prepared, is turned into a tub, and, some hours after, it is given to the cattle, who eat it with an avidity that marks a delicious food; continuing this method some time, they cast their hair, grow smooth, round, fat, and so improved, as to sell frequently at double the price*.

MILANESE—*Milan.*

Examining the ox-stalls of a farmer near the city, I found his standings $6\frac{1}{2}$ feet wide, and made almost like my own at Bradfield; except that, instead of a step and gutter, he has a trench at their heels, in the Dutch method. I thought the house too close and hot; yet there were air-holes, but all stopped, the farmer saying, that a cow gives more milk for being kept hot; but in summer the sheds are open, and quite cool. They begin to work their oxen at four years old, and continue till ten, sometimes till twelve, but after ten they do not fatten so kindly. They all draw, as in Piedmont, by the withers; fine ones sell at thirty louis the pair. A pair will draw 4000 lb. of hay, each pound 28 oz. on a waggon that weighs 1000 lb. more, with wheels not three feet high, and

* *Memorie della Società Agraria*, vol. i. p. 73.

wooden axles. 4000 lb. at 28 oz. Milanese, are 6777 lb. at 16 oz. English; and three tons being only 6720 lb. this is a considerable load, in such a vehicle, and should imply no bad method of drawing, yet I cannot like it so well as by the shoulders. They are never shod, except on stoney hills.

This farmer fattens his oxen in winter with lintseed cake, giving 5lb. or 6lb. a day to each beast, and as much hay as they will eat; the best for them, that of meadows not watered. When it is scarce, they substitute forage of maiz, sown thick for mowing; and this hay they cut in a chaff-box, to the length of one or two inches.

But the great object in the vicinity of Milan, as well as in the Lodizan, &c. is a dairy; I viewed several considerable ones, from four to seven miles from the city, and had my inquiries very satisfactorially answered. Some of the particulars deserve noting, for I should remark, that all the dairies of the Milanese are very famous; and few produce cheese, that is not sold under the general name of Parmesan. They buy in, about the end of October, Swiss heiffers, with calf, generally at two years and a half old, under contract, that if they do not calve, or do not give milk from four teats, the bargain is void: the price, on an average, $13\frac{1}{2}$ louis. They keep so long as till fifteen years old, or so long as they breed. Till the age of six years, the milk augments annually, but afterwards diminishes. They are sold lean at 15 to 36 crowns each, 6 liv. (at 8d.) The best two or three cows, in a dairy of forty or fifty, will give thirty-two bocali of milk per diem; but, in common, twenty-four, or eighteen English quarts. The cows are mostly of a dark brindled red colour, with small horns*; and it deserves noting, that the best made cow in fifty-five, *quasi* fattening, was the best milker.

In respect to cheese, a dairy of fifty-five, which I viewed, make three hundred and twenty in a year, at 40 lb. on an average, or 12,800 lb. or 232 lb., per cow (380 lb. English), at 90 liv. per 100 lb.; in all, per cow, in cheese, 7l. 10s. English. The butter amounts to 12 lb. to every cheese of 40 lb. at 26s. per lb.: 3840 lb. which, at 26s. are 4992 liv. (166l. 8s. English, or, per cow, 3l.) The calf, at eight or fifteen days, sells at 72 liv. per 100 lb. nett, and being weighed alive, 28 lb. per 100 lb. is the deduction. I do not clearly understand this note, on revision, but as veal at Milan is about the same price as in England, I shall call the calf 10s. To fifty-five cows, seven sows and a boar are kept, which breed forty hogs that are reared; twenty sold in spring, and twenty in autumn, average $1\frac{1}{2}$ louis each; in all for hogs, 60l. English.

† It is remarked by an Italian writer, that in chusing cattle, the horns must not be overlooked; the larger these are, the worse. The Swiss cows that are reputed the best, have small horns; and, on the contrary, those of Sardinia, that are poor milkers, have very long ones. *Elementi D'Agricoltura di Mitterpacher*, tomo ii. p. 257, notes.

LOMBARDY.

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Recapitulation, per cow.—				£.	s.	d.
Cheese,	-	-	-	7	10	0
Butter,	-	-	-	3	0	0
Calf,	-	-	-	0	10	0
Hogs,	-	-	-	1	2	0
				12	2	0

The account of a dairy taken next door to me, in Suffolk, is complex, and such as not one man in twenty keeps accounts particular enough to ascertain; it may, therefore, be easily supposed, that greater difficulties occur in a foreign country, through the medium, not only of a different language, but of different manners and customs. This account was given partly as an actual one of fifty-five cows, and partly by calculation; but in such a number of cows, there will be some dry; there will not be fifty-five calves sold from fifty-five cows; hogs must, for such a produce, have some corn given them, though not much; and I should consider this estimate rather as what a good cow ought to do, barring accidents and exceptions, than as a fair average of a large number.

The expences, however, are high, as well as the produce; among others, there are the following to this dairy of fifty-five:

				liv.
Chief dairy-man, the <i>cazaro</i> .—	Wages,	-	-	130
	Five moggii of maiz, at 20 liv.	-	-	100
	One ditto wheat, at 34 liv.	-	-	34
	Half ditto rye, at 18 liv.	-	-	9
	One ditto of white rice,	-	-	44
	One hog, of 120 lb. at 15s.	-	-	90
	Lodging, fuel, salt, and butter,	-	-	
The under dairy-man, <i>sotto cazaro</i> .—	Wages,	-	-	127
	Board in the farmer's house,	-	-	
	Three men, at 70 liv. each,	-	-	210
	3½ moggii maiz, at 10½ liv.	-	-	210
	½ ditto rye, at 3½ liv.	-	-	63
	¾ ditto rice, at 2¼ liv.	-	-	99
	½ ditto mullet, 1½ liv. at 18 liv.	-	-	27
	Towards board, 20 liv.	-	-	60
	Land enough for their flax,	-	-	
	Two children, for the hogs, at 30 liv.	-	-	60
	Five faggots per diem, at 5 liv. the 100	-	-	
	4 liv. if large,	-	-	60
				1323
B b 2				Here

Here are above 44l. English, without knowing at what to calculate the three other articles; probably they would raise it to above 20s. a cow. There is likewise the wear and tear of the dairy implements, salt, oil, and many small articles; besides hazard, and the loss by difference between the sale of old cows and the purchase of young. In regard to the management of the cows, they eat in winter, that is, from the middle of December to the end of March, nothing but hay, and the allowance is 21 lb. of 28 oz. each cow, per diem; this is 2184 lb. of Milan, or 3559 lb. English, or about $1\frac{1}{2}$ ton. This single article of expence, without any other consideration, would make a very great produce necessary, or the farmer could not live. They milk at break of day, and sometimes before it: in the evening, two hours before sun-set: the quantity most in the morning. The best cheese is made when the cows feed on white clover, which comes of itself the second year, where red clover was sown, which occasions a vulgar notion here, that red clover changes into white. This second year's white clover is better than perennial meadows for cheese. For one fortnight in a year, they foil their cows,—the last half of March,—and the grass goes thrice as far as when eaten in the field; yet they never do it at any other season. The most singular circumstance, is that of their stalling their cows, to empty racks, most of the day and all the night; they are turned out at eight or nine in the morning, for three or four hours, and all the rest of the twenty-four they have nothing. I inquired particularly into the motives for this very extraordinary practice, and was assured, it was necessary to make good cheese; as without it the milk would not have the requisite richness. During some seasons of the year, and in very wet or bad times, they give them, during this fast, a small quantity of hay; but the practice is confined to such times, and is an exception from the general rule, which is decidedly that the cows must not eat grass at pleasure. It is so very singular a practice, as certainly to deserve experiment in England. The French practice, of milking thrice a day, is quite unknown.

The method of making the cheese known in England by the name of Parmesan, because the city of Parma was once the *entrepot** for it, was an object I wished to understand as well as possible. The idea is, that all depends on soil, climate, and irrigation; and the boasted account, that the Kings of Spain and Naples, in order to make similar cheese in their territories, at least for their own tables, had procured men of skill from the Milanese for this purpose,—contribute to give a readiness every where in answering questions, as they are all very well persuaded, that such cheese can be made no where else.

* This is the general opinion, but a late writer has shewn that it is an error, and that Parma and Piacenza were once the country in which the best was made.

In order that I might view the process to the best advantage, the Abbate Amoretti conducted me to the dairy in question, belonging to the house of Leti. It is, in the first place, necessary to observe, that the cheeses are made entirely of skimmed milk; that of the preceding evening, mixed with the morning's milk: the former had stood sixteen or seventeen hours; the latter about six hours. The rennet is formed into balls, and dissolved in the hand in the milk; the preparation is made a secret of, but it is generally known, that the stomach, of the calf is dressed with spices and salt. The rennet was put to the milk at twelve o'clock, not in a tub, but in the chauldron or boiler, turned from off the fire-place at ten o'clock; the heat 22 degrees of Reaumur's thermometer, and common to 24 degrees ($81\frac{3}{4}$ Fahrenheit's), the atmosphere being at the same time $16\frac{2}{3}$ (70 Fahrenheit's). In summer, the whole operation is finished by eight in the morning, as the heat fours the milk if in the middle of the day. At one o'clock the cazaro examined the coagulation, and finding it complete, he ordered his sotto cazaro to work it, which he did, with a stick armed with cross wires, as described in *Annals of Agriculture*; this operation is, instead of cutting and breaking the curd, in the manner it is done in England, free from the whey. When he has reduced it to such a firmness of *grain* as satisfies the cazaro, it is left to subside, till the curd being quite sunk, the whey is nearly clear on the surface; then the cauldron which contains it, is turned back again over the fire-hearth, and a quick fire made, to give it the scald rapidly; a small quantity of finely powdered saffron added, the sotto cazaro stirring it all the time with a wired machinè, to keep it from burning; the cazaro examined it, from time to time, between his fingers and thumb, to mark the moment when the right degree of solidity and firmness of grain is attained. The heat was 41 deg. ($124\frac{1}{2}$ Fahrenheit), but it is often 44 ($131\frac{1}{4}$ Fahrenheit). When the cazaro finds it well granulated by the scalding, he orders his deputy to turn it off the fire; and, as soon as a certain degree of subsidence has taken place, empties about three-fourths of the whey, in order the better to command the curd. He then pours three or four gallons of cold water around the bottom of the cauldron, to cool it enough for handling the curd; then he bends himself into the vessel, in a formidable manner, to view it, resting his feet against the tub of whey, and with his hands loosens the curd at bottom, and works it into one mass, should it not be so already, that it may lie conveniently for him to slide the cloth under it, which he does with much apparent dexterity, so as to inclose the whole in one mass; to enable himself to hoist it out the easier, he returns in the whey, and taking out the curd, rests it for ten minutes or a quarter of an hour in a tub to drain. The vat, in the mean time, is prepared in a broad hoop of willow, with a cord round to tighten it, and widens or contracts at pleasure, according to the size of the cheese. Into this vat the curd is fixed, and the cloth folded

over

over it at top, and tucked in around. This is placed on a table; slightly inclining, to carry off the whey that drains from the cheese; a round plank, three inches thick, shod with iron, like the block-wheel of a barrow, is laid on the cheese, and a stone about thrice the size of a man's head on that, which is all the press used; and there ends the operation. The cheese of the preceding day was in a hoop, without any cloth, and many others salting in different hoops, for thirty or forty days, according to the season,—thirty in summer and forty in winter. When done, they are scraped clean, and after that rubbed and turned in the magazine every day, and rubbed with a little lintseed-oil on the coats, to be preserved from insects of all sorts. They are never sold till six months old, and the price 90 liv. the 100 lb. of 28 oz.

The morning's butter-milk is then added to the whey, and heated, and a stronger acid used, for a fresh coagulation, to make whey-cheese, called here *mascho-pino*. Little ones are kept in wooden cases, in the smoke of the chimney.

Upon this detail I am to remark, that the rules that govern the operation of making cheese in the Milanese seem to be very different from those which are attended to in England. These are marked distinctions.

- I. Starving the cows during so large a portion of the day.
- II. Breaking and scalding the curd.
- III. Light pressing.

The mode of feeding, which these farmers pursue, they think essential to good cheese; and that if the cows were allowed to pasture all day long, it would be difficult, perhaps impossible, to make cheese of equal goodness. It would be idle to reason upon a proposition, which demands in other countries experiment alone.

The breaking of the curd and scalding is absolutely different from ours, and apparently a method infinitely superior; our breaking by the hand, and cutting into cubes and other ways, are gross, and render it difficult for the scalding whey to operate equally; but in the Italian method it is broken minutely; and, by keeping the heating whey constantly stirring, the scald is equal throughout; and, operating on the minutely divided curd, must take a more regular and a greater effect. I described to the cazaro the method used in England, and asked his opinion, on which he replied—"Il vostro formaggio in quel modo non puol'essere troppo buono: come è la grana?" By referring to the grain of the cheese, it is plain he thought that the texture of it demanded this way of operating.

In regard to pressing; all with whom I conversed were much against any very heavy weights; and seemed of opinion, that a good cheese might be
pressed

pressed into a bad one. Firmness, weight, and solidity, they contended, should arise from the right fabric of the cheese, and from adapting the fabric to the land and to the season, but never from much pressing, which would be a bad way of remedying either evils or mistakes. Hoved cheeses are very rare with them, which may possibly proceed not only from the granulation given by their method of scalding, but also from their moderate pressing. However it must not be imagined that the excellency and peculiarity of Parmesan cheese depend altogether upon the fabrication; their own idea is probably very just, that soil, climate, and irrigation come in for their share; and that the abundance of certain plants has an influence; but this last cause will not have much stress laid on it, since clovers are found to be the chief plants.

I shall not quit this most interesting district, without recommending it strenuously to those who would wish to give themselves a completely good farming education. For such a purpose, Codogno would be a proper station; for it is surrounded by great dairies, and contains the largest magazines of cheese of any town in Lombardy; the consequence of which is, a regular intercourse with all the dairy masters of the Lodizan. Much useful knowledge might here be gained in irrigation, and in making cheese.

The oxen of this dairy farm begin to work at four years old; and are sold at eleven or twelve years old, from 9 to 12 louis each. A pair will plough eight pertiche a day; and draw, waggon included, 3000 lb. of 28 oz. twenty miles.

Mozzata.

They practise a singular method of fattening oxen here. They put chopped straw, a little hay, the leaves of maiz, and also some flour of it, into a tub, and pour in hot (not boiling) water; and as they give this soup to the beast, they add for each a handful of oil-cake in powder, or, for want of that, of elm leaves in powder; oak leaves they give green. Another food in use is, powdered acorns, which is given instead of oil-cake, and with good success.

Lodi.

The cows here are generally of a blood red colour, long, lank, and ill made. In a dairy of ninety, they make, for one hundred and sixty days, one cheese a day, of 60 lb.; but in April and May it is of 70 lb. After St. Martin, the beginning of November, greater, but not every day: in seven months, 190 cheeses; and in the rest of the year, 170; in all, 360; this is 240 lb. per cow. In feeding, they give the cows nothing from four in the afternoon till nine the next morning, unless the weather be very bad, and then a little hay. In making the cheese, I found very little variation in the practice from that already described.

scribed. For the coagulation, or what our dairy-wives call *setting*, they heat the milk gradually, and take care not to do it too much at once. In the great heats of summer, they set it without heating, and even put ice or snow (with which every dairy is provided) to cool it; but they do not consider the heat at setting to be a point of much consequence, as a little more or less heat makes no difference. The curd is broken exactly as described before, with two machines, one of wood only, the other armed with fine wires, and the saffron added during that operation. Scald it as at Milan, and, upon doing this with skill, they assert, that much depends; as by more or less scalding they can remedy certain deficiencies in soils and plants. The rest of the operation is just as already described, and all the utensils the same; the weight something less than at Milan; and here as great enemies to much pressing. The cheese made yesterday is all honey-combed in the coat, and as yellow as was, a pale yellow: whereas at Milan the new cheeses are quite white. These honey-combs wear out by scraping after salting, which is for thirty-six or forty days; they are then coloured, and there is given to them an appearance of a whitish crust, or efflorescence artificially. They are preserved by oiling, as at Milan. Good cows give about five gallons of milk per diem; the best of all, six. Sixty cows require 100 pertiche for six months in summer.

Codogno.

The produce per cow is here reckoned at 100 lb. of cheese*, at 28 oz. at $22\frac{1}{2}f.$ per lb. and 80 lb. of butter, at $24f.$ The calf sells at 20 liv, at fifteen days old; and the produce of hogs, 12 sows to 100 cows, which pay about 10 liv. per cow.

<i>Milanese.</i>	<i>liv. f.</i>		<i>Sterling.</i>	<i>£. s. d.</i>		
100 lb. cheese, at $22\frac{1}{2}f.$	112	10	—	3	15	0
80 lb. butter, at $24f.$	96	0	—	3	4	0
Calf, — — —	20	0	—	0	13	4
Hogs, — — —	10	0	—	0	6	8
	<hr/>			<hr/>		
	238	10		7	19	0
	<hr/>			<hr/>		

Thirteen pertiche of land are necessary to carry a cow through the year, which they cut for hay thrice, and feed once. Such land bought, sells at 300 liv.

* This is the general idea; but let it be noted, that the particulars of two dairies I took, one of which was near Milan, were different; one 232 lb. per cow; the other, near Lodi, 240 lb. per cow; yet there is, near Milan, a notion, that the produce is 100 lb. per cow. The difference, probably, is this, that upon a general calculation of all the cows of a district, good, bad, and indifferent, dry, and giving milk, the quantity is 100 lb.; but in certain capital dairies, and reckoning only the cows in milk, it is more than double.

and

and lets at 10 liv. The greatest dairy in the country, 110 cows, and the price ten louis each. In summer, they milk at four o'clock in the morning, and at sun-set. Make the cheese at eleven in the forenoon; in winter at any time. Skim all the milk, and never set it for coagulation without heating it by fire. In other respects, the manufacture is conducted as already described. They colour the coats with earth, and the whitish efflorescence is given with rye-meal. When the grass is oldest, it always give the best cheese, but the produce, after being down four years, declines so much, that the almost general practice is to plough it.

View the magazine of cheese, at Codogno, of Sig. Bignami, and of Sig. Stabilini;—the latter are immense. Most of it is sold in Italy, much in Spain, and least of all in France; there is not a solid cheese in that kingdom that is eatable, and yet they consume little Parmezan!

Condogno to Crema.

Messrs. Bignami had the goodness to conduct me to a great farm, two miles from Codogno, in the way to Crema;—here I found, that coagulation takes, according to the season, from one to four hours; in some parts of the Milanese, the cazaro informed me, that they *set* the milk without warming: here never; always heat it by fire. The *caggio* (rennet) is in balls about twice as large as a pigeon's egg, put in a linen coarse cloth, and rubbed, holding it in the milk, till it is dissolved. In this dairy, after three hours coagulation, the milk was as hot as if fresh from the cow. Quantity of saffron, $\frac{1}{4}$ oz. to a cheese of 60 lb.—945 lb. of milk, of 28 oz. make a cheese of 60 lb. weighed six months after. The same quantity of milk, in spring and in autumn, makes more cheese than in summer. Best and most from old grass, but a cazaro who really understands his business, will make all alike; and the idea here is that fabrication is all in all. A cheese of 30 lb. will be as good as one of 100 lb. The scalding in their manner, is to granulate the curd, and, united with so small a pressure, leaves cavities in the texture of the cheese, that fill with an oleaginous liquid, and form the peculiar excellence of Parmezan cheese. With the methods used in England, such cavities spoil a cheese. I must, however, remark, that such Parmezan as was common many years ago, in which these cavities, and their contents were of a texture that would allow of drawing out like a thread of glue, is not so common now. The solid cheese, without cavities, common at present, is not much better than our North Wiltshire, and is apt to dry much sooner, if equally kept. *Quere*, if this declension of quality is not to be imputed to their ploughing all the country? When their cheese gained its great reputation, it was made from old meadows; now all is from arable land. Here it is kept five or six years,—never till ten. Walking with the farmer,

the master of eighty cows, into his fields (1750) pertiche), I begged him to pick the plants in the order of his estimation for cheese, which he did;—first, *trifolium repens*; second, *trifolium pratense* and *plantago lanceolata* equal; third, *chicorium intybus*. These he esteemed capital. The *ranunculus repens* bad; all the grasses, properly so called, bad, on comparison with those above; but *lolium perenne* the best, if it come naturally; bad, if sown. *Gallega officinalis* bad. They sometimes do not sow any thing to make a meadow, leaving the wheat-stubble to cover itself; a barbarous practice, since they confess, that in the first year it yields little. There were dung-hills in most of the fields, well mixed and rotten, to be spread in winter. Feed the cows, in winter, only with hay, and 20 lb. of 28 oz. the daily allowance; the price now $7\frac{1}{2}$ liv. per. 100 lb. I forgot to remark, that all the milk-trays are of copper: and that ice is in every dairy, to put into the churns with the cream. The cows are here fed, as every where else in the Milanese, but a few hours in twenty-four; yet longer than in some districts, for they are abroad seven hours; they eat nothing while tied up in the sheds.

In 1733, there were in the Lodizian 197 dairies: in 1767, there were 236, each of which had 120 cows, on an average, making 290 cheeses each dairy per annum; in thirty-four years, increase—39 dairies, 4680 cows, 11,310 cheeses, and value 848,210 liv.* This is Count Carli's account, but I suspect an error†. as I heard no hints of any decline; and at Codogno, the dairies were calculated for me, apparently with attention, at 213 each, making 310 cheeses in a year, or 66,030 cheeses, of 50 lb. each, or 3,301,500 lb. of 28 oz. at 1 liv. a lb.; this makes 110,047l. and the account I received was, that, of this quantity, two-thirds were exported.

In regard to the origin of this cheese, it deserves notice, that it is not three centuries since this great advantage of irrigated meadows has been here known; and I may observe, that the Cistercian monk who has written so well—*Sull'Irrigazioni de Prati*, in the *Atti della Societa Pat. di Milano*, seems to admit, that the original manufactures of Parmezan cheese was in the territory of Parma; and refers to original papers for shewing, that Milan was supplied, three centuries ago, with this cheese from Parma. A clearer proof of this cannot be produced, than that in the ledgers of the monastery of Chiaravalle, there are entries of the purchase of cheese from Parma, which, most assuredly, could not have taken place, if such cheeses had been made at home. And this seems to be confirmed by the account of the entry of Louis XII. into Pavia, in 1499, given by Francesco Muralto, juris consulto of Como, who says,—“*Multa*

* Carli, tom. i. p. 317.

† It must be a gross error to calculate the dairies at 120 cows, on an average; for in all my inquiries, I heard but of one that reached 110.

fuere per Papienses dono regi tradita et inter cetera formæ centum casei Placentinæ civitatis." It is also worth observing, that though they did not make good cheese at this period (as we may judge, from their buying it elsewhere), yet some cheese was made at Tecchione, a farm belonging to them, of the weight of 14 lb. per cheese, as it appears by their ledgers for the year 1494*.

Venice.

This city is supplied with beef from Bosnia, Carinthia, Styria, and Hungary: at present the export from those countries is prohibited, on account of supplying the Emperor's armies in Hungary. Mutton from Dalmatia, and Bosnia.

ECCLESIASTICAL STATE.—*Bologna.*

In their cow-houses they have the same step at the heels of the beasts as I have in my own, and which I copied from Mr. Bakewell many years ago; but they have applied it to their horse-stables also, which I never met with before; yet it is an obvious improvement, which well deserves imitation. The floors of their stalls are level.

TUSCANY.

Though the quantity of cattle of every kind in this country is much inferior to what it ought to be, yet is the art of fattening an ox well understood. In summer they feed on mown clover and *saggina* (the great millet, *holcus sorghum*); also on maiz, and a mixture of all sorts of corn and pulse, called *farrana*. Price of an ox, 45 scudi (at 5s. 8d.); a cow, 30; a sheep 1; a horse, 20; a hog, 7.

Account of a Dairy of Eight Cows, at Vilamagna, in Tuscany, belonging to Conte Orlando del Benino.

	Scud.	liv.	s.
Eight cows cost	85	2	0
Produce, first year, in butter and milk,	83	4	2
Second year, value of the cows and 3 calves,	92	3	4
Produce.—Calves,	44	3	15
Milk and butter,	78	6	9
	127	3	4
Cheese,	3	0	4
Value of the cows,	84	3	4
	214	6	12

* *Atti*, vol. ii. p. 220, 221.

Expences.

	Scud.	liv.	s.
Value of the cows,	92	3	4
Dairy man,	12	0	0
Bran and bull,	6	5	4½
Saggina and clover sown for them,	3	0	0
Profit,	100	5	3½
	<hr/>		
	214	6	12
	<hr/>		
Which, on 8 cows, is per cow,	12	10	8
At 5 liv. 15s. the dollar, and 47d. a dollar sterling	£. 3	3	6
Which is per week,	0	1	3
	<hr/>		

In which experiment almost the whole of this was profit, because no fewer cattle of any other sort were kept; but it must be obvious, that 1s. 3d. a week is, according to our ideas, a very poor return for keeping a cow*. I copy this account from Sig. Paoletti, with whom I had the pleasure of conferring personally on agriculture, and who informed me, that at Villamagna they begin to work their oxen at two years and a half old; they change some every year; and gain by their improvement, while worked, about 6 scudi (of 5s. 8d.) the pair, on an average, per annum; buy at 70 scudi, and sell at 76. Cows give two fiasce of milk per diem, during eight months; price 4s. each.

MODENA.

Register of all the live-stock in the Dutchy of Modena, taken in June 1771:—Oxen, 42,615; cows, 61,445; calves of one year, 24,172; calves, 21,326; horses, 8,313; mules, 836; asses, 11,543; hogs, 137,326; sheep, 329,015; goats, 35,518. Augmentation in the rest of the year; great cattle, 12,000; small, 38,000.

PARMA.

Many and great dairies in the Parmezan; some to sixty cows, and numbers from twenty to thirty; and those who have a few cows, carry their milk to some neighbouring dairy, and receive cheeses in proportion to the quantity; but this cheese has not the reputation at present of being so good as that of the Lodizan. As this country gave its name to the best cheese in Europe, and once certainly made the best, I was desirous of knowing how far the mode pursued in the manufacture, differed here from that of the Lodizan: in the dairy of a

farmer of the Count de Schaffianatti, I had this opportunity. The apparatus is nearly the same, except that the stick with which the curd is broden, and which in the Lodizan is armed with cross wires, is here only a bush, the branches of which are drawn a little together by a string; this is not so effective as fine wire, and is a variation in a point of importance in giving a fine *grain*. I have remarked already, that the board which in pressing is laid on the vat, is in the Lodizan one and a half or two inches thick; here it is five or six inches, and heavy; and the stone used to press it four or five times larger, yet the cheeses here are not often more than half the size of the others; this variation, in a circumstance that cannot be unessential certainly deserves notice; if so very light a pressure in the Lodizan is given, the cheese which is superior to all others, it undoubtedly should lead the farmers of Parma to examine whether the inferiority of their cheese does not arise wholly or in part from these variations; the country, it is true, is not watered to one-tenth of what the Lodizan is, and the cows feed in perennial meadows, instead of the pasturage of arable land. The trays here are of wood, instead of copper for the milk; and it is skimmed, as at Lodi, before making the cheese. The coagulation is made usually in three quarters of an hour, if the milk be what they call wholesome; that is, if it have no particular quality that demands a variation, in which case it is coagulated in half an hour: they vary the scalding also; for bad milk they scald with a fierce quick fire, but good is done more gently. In managing the lump of curd, when settled to the bottom of the boiler, they vary also; they press it with a circular board, fixed at the end of a stick or handle, and then get a milk tray under it; and when they have hoisted it out, they leave it to drain in that tray about half an hour; at Lodi, ten minutes, or at most a quarter of an hour. The common price of the cheese 30 liv. ($2\frac{1}{2}$ d.) the peso (22 lb. English.) I tasted it at the table of the Count de Schaffianatti, and also at Parma; and the inferiority to the Lodizan is great.

The attention of giving salt to cattle and sheep here, as in every other part of Italy, is regular; they even consider a plenty of salt as somewhat essential to having proper stocks of those animals; and gave me an instance, which is remarkable. In the Coursi di Monchio, a valley in which the bishop is the sovereign, there is no gabelle on salt, and therefore given much more plentifully to cattle and sheep; the consequence is, that the numbers of both are much greater, proportionably to all other circumstances than in any other district.

SAVOY.

They reckon, at Laneshburgh, that three goats are equal to one cow; the price here is 11 liv. or 12 liv. At Isle, in Alsace, a good goat sells from 12 liv. to 30 liv. French, in common 20 liv. Some there are so good that two equal a cow; but at Tour d'Aigues, in Provence, it takes four to equal a cow, the price 10 liv. or 12 liv. French.

SECT. III.—OF SHEEP.

Nice.

I here observed, what appeared very singular, a flock of sheep brought down from the mountains to drink the sea-water, which is, I suppose, to save salt. The gardeners near the town generally keep a few weep, confined in sties, just as hogs in England, and fed with the offal of the garden. I took a specimen of the wool of one of these stie-fed sheep; more like goat's-hair than wool; it sells at 6*s.* the lb.

Turin.

The price of sheep from 10 liv. to 15 liv. The fleece is 8 lb. at 5*s.* unwashed.

MILANESE.

Throughout this country I scarcely saw any sheep, and those few bad.

VENETIAN STATE.—*Bergamo.*

Here I met a flock; an ugly breed; large, long, and ill made; without horns; the wool coarse and hairy; large hanging ears; and their throats swollen almost like wens. They have a fabric of woollen cloth here, but the wool comes from Apulia.

Brescia.

The fleeces here are $4\frac{1}{2}$ lb. (about $2\frac{3}{4}$ lb. English,) and sell at 25 liv. to 30 liv. per peze, not washed, which is about 1*s.* English the pound.

Verona.

Price 30*s.* the lb. of 12 oz. (1*s.* the pound English.)

To Vicenza.

Meet several flocks; all are clipped twice a year; the breed polled, and much like those, but not so large, as on the other side of Verona.

Vicenza.

The sorts of sheep known here, are *Gentili*, which live only in the plain, not being hardy enough to resist the mountain cold; their wool is longer than of the other sorts. *Tosetti*, these resist the cold well; have short wool, clipped twice.

twice. *Monte Padouana*, are of a much greater size; the flesh excellent; are clipped twice. Price of wool, $2\frac{1}{2}$ liv. per pound unwashed (the ounce of Vicenza, 12 to the pound is to the English ounce as 690 is to 480, as I found, by buying an ounce weight there); this price is equal to about 11d. the English pound. It is remarkable, that they here feed their sheep in winter, with a mixture, made in a hole in the ground, trodden well in, of *zucca* (gourds) cut in slices; the mark of grapes, vine-leaves, and green grafs.—Price of wool here:—*Gentili preparata*, 6 liv.; *Gentili non preparata*, 5 liv. 5s.; *Tosetta*, 5 liv. to 6 liv.; *Tefino*, 2, liv. 10s.; *Padouana*, 4 liv.; all by the pound of 12 oz. The ounce is to that of England, as 690 to 480; the pound, therefore, equals 17 oz. English,— $5\frac{1}{2}$ liv. is above 2s. 6d. English.

Padua.

Price of sheep about 2 ducats. In common they clip but once a year; fleece 3 lb.

ECCLESIASTICAL STATE—*Bologna.*

Price of a good sheep, 14 pauls (7s.) Produce, per sheep, of a flock;—lamb, 4 pauls; wool, $3\frac{1}{2}$; cheese, 4; in all $11\frac{1}{2}$ (5s. 9d.) per annum; half to the proprietor, half to the peasant. The wool 3 lb. at twice shearing, and at 13 baiocchi the pound (10 baiocchi to the paul, of 6d. less a fraction). It is washed on the back before shearing. There are 25,000 to 30,000 sheep in the *Ferrarese*.

TUSCANY—*Bologna to Florence.*

Some flocks of sheep are scattered on the Appenines, of a small and rather pretty hornless breed. Near Florence, they cut the lambs in June, and sell them in September, to those who keep them till March. Price, in September, 10 liv. (7s. 1d.) and in March, for 18 liv. (12s. 9d.); there are few, or none, of two or three years old. They clip but once; weight of the fleece 4 lb. at $1\frac{1}{4}$ paul per lb.; washed before clipping (English weight and money, the fleece is 3 lb. at 1s. 1d. per lb.) Wethers are, in some places, fattened on oats, barley, and hay, and sometimes with a few raves.

Villamagna.

Thirty-six sheep kept on 483 stori of land, each giving 3 lb. of wool (equal to $2\frac{1}{4}$ lb. English), at this year, $1\frac{1}{2}$ paul, and last, $1\frac{1}{3}$ (the paul $5\frac{1}{2}$ d.); clipped but once a year, in May, and washed before. Each sheep $\frac{1}{4}$ of a paul in cheese. Thirty-six bring, on an average, twenty lambs, which sell, at five or six weeks, at $4\frac{1}{2}$ pauls; at six months, 7 or 8 pauls.

Two hundred sheep from the mountains, that pass the winter in the Maremma, the expence 157 scudi, composed of twenty rams, fifty ewe hoggits, one hundred and thirty breeding ewes; fifty lambs kept for stock.

	Scud.	liv.
Fifty lambs for stock,	39	2
Eighty lambs fold,	12	0
Wool, 7 lb. the pair, at 10 scudi the 100 lb.	70	0
Cheefe, 2½ lb. to each sheep, at 6 s. per. lb.	11	0
	<hr/>	<hr/>
	132	2
Half to the proprietor	66	1

Expencc.

Winter food in the Maremma,	40	0
Two hundred sheep to a shepherd; 24 ftari of corn for the winter,	12	0
Passes, charges, duties, regulated at 6 scudi the 100 sheep,	12	0
Expences of travelling, utensils, fees, &c.	8	0
Pasturing in summer in the mountains,	4	0
	<hr/>	<hr/>
	76	0
Half to the proprietor,	38	0
Nett profit to proprietor,	28	1

Which profit, being on a capital of 157 scudi, is 18 per cent *.

It is an observation of Sig. Paoletti †, that draining the Maremma, and cultivating it, have lessened the number of sheep in Tuscany considerably: great flocks, before that period, were kept in some mountainous districts in summer, and pastured in the Maremma in winter; but cultivation has changed this. He does not say that the people of the Maremma have sheep of their own, but observes, that it is a diminution in number. This is sufficient to prove, that the improvements in the Maremma have been on false and vicious principles; for, if they had been on just ones, sheep would have been increased instead of lessened.

Sig. Paoletti recommends that all sheep should have 1 lb. of salt in March, and 1 in October, which makes them healthy, and to yield more wool ‡.

* *Tramontani Del Accrescimento Del Bestiam e Toscano*, 8vo. p. 96.

† *Penfieri*, p. 207. He mentions their being *prodigiosamente piu numerose*, a century before, p. 221.

‡ *Penfieri*, p. 208.

MODENA.

Wool here sells from 2 liv. to 3 liv. per lb. washed; equal to 12½d. per lb. English. There are many sheep in the mountains, but miserable things; clipped twice a year.

PARMA.

In going to Firenzuola, I examined the wool of a flock, and found it more like the hair of a dog than wool; and all I see, which are but few, are alike hairy; most of them polled, but some with horns; not badly made, but feel worse. These are the flocks whose wool, Monf. de la Lande says, is estimable!

PIEDMONT.—*Pavesè*.

On entering the King of Sardinia's country, and for many miles, see little parcels, of from ten to twenty-five, of poor dirty housed sheep, feeding on the young wheat. Asti was formerly famous for wool;—*nelli antichi tempi famosa per la sua lane**; but the country contains none at present, to support that character.

SAVOY.

Unwashed wool, 10s. the lb. of 12 oz.; fleece 3 lb. to 6 lb.; it goes to France or Piedmont. Sheep, 9 liv. to 12 liv. each. Though cattle and sheep are the great riches of all Savoy, yet no care taken of the breed, and the wool all bad†.

The price of wool, regard being had to that only which is long, coarse, and bad (but not the worst), may be stated in Lombardy at 1s. English, the English pound; such would sell in England, I calculate, at about 7d. or 8d. per pound.

* *Giulini*, tom. xii. p. 19.

† I may here add a minute on goats: Marquis Ginori introduced the Angora goats into Tuscany, for making camblets, which manufacture has succeeded so well, as to be termed *rispettabile manifattura* by Paoletti. *Penfieri*, p. 220. And it is observed by another writer, that if they are not superior to the antient camblets of Brussels, they are, at least, equal to them. *Ragionamente sopra Toscano*, p. 167.

CHAP. III.

Of the Management of Arable Land.

THE minutes I took, concerning the conduct of arable land, may, for the sake of clearness, be thus divided:—1, Of the courses of crops. 2, Of seed and product. 3, Of the culture of certain plants. 4, Of implements. 5, Of manures.

SECT. I.—OF THE COURSES OF CROPS.

PIEDMONT.—*Chentale.*

A year of fallow common in five or six years, during which year the land is never watered, only exposed to the sun. Wheat is sown on fallow; on clover land; always after hemp, because the land is in high order; the same after maiz, if well manured; in which case also after millet sown in June, otherwise mellin or rye. The fallow for wheat, commonly follows buck-wheat, called here *fromentin*, or millet. Clover is sown among rye in March, never among wheat. Millet de cottura is sown in June; millet de restuba the end of July, after wheat; and then dung well for hemp.

Turin.

In some arable land I viewed, a few miles from this capital, the following most extraordinary course was pursued, and was mentioned to me as being not uncommon; 1, maiz; 2, wheat; 3, wheat; 4, wheat; 5, maiz; 6, wheat; 7, wheat; 8, wheat.

The year of maiz being considered as such a preparation, as to allow of three successive crops of wheat. The practice however is barbarous. Upon the farm of Sig. Briolo, the following is the course;—1, maiz; 2, wheat; 3, rye; and when the land wants repose, clover is sown upon a small part.

Vercelli.

Upon good wheat land; —1, maiz; 2, wheat; 3, wheat; 4, rye. And in the rice grounds;—1, fallow; 2, rice; 3, rice; 4, rice. They have here an excellent practice, and it extends, more or less, over all Piedmont, which is to
mow

mow clover by the 10th of May, and to plow the land and plant maiz, which succeeds greatly after clover.

MILANESE—*Milan.*

The arable lands never repose ; but a quick succession is reaped. Two crops of bread corn are gained in one year, by sowing maiz in July, after wheat.

Milan to Pavia.

The course common in the rice grounds, is,—1, rice ; 2, rice, 3, rice ; 4, fallow, and dung ; 5, wheat, clover sown, either with it in autumn, or upon it in spring ; the former best ; 6, clover ; 7, clover ; 8, clover ; 9, flax, and then millet the same year : and then rice again, as above.

Also,—1, wheat ; 2, clover ; 3, clover ; 4, clover ; 5, clover ; 6, flax, and then maiz ; 7, wheat, and clover again. Sometimes after flax, coleseed for oil. Another course,—1, 2, 3, clover ; 4, maiz ; 5, rice ; 6, rice ; 7, rice ; 8 fallow ; 9, corn, and clover.

In the Pavese.

1, Rye, and then fallowed for, 2, wheat, sown with clover in February, mown with the stubble, and then fed ; 3, clover, 4, clover ; 5, clover ; 6, flax, and then millet ; or, instead of both, maiz ; 7, wheat ; 8, wheat, and left, then, sometimes, to pasturage under clover.

Mozzata.

A course common here,—1, clover ; 2, winter flax ; 3, lupines ; 4, maiz, for forage ; 5, coleseed ; 6, cabbages ; 7, panic ; 8, hemp ; 9, beans. This course will be found to occupy about twelve pertiche in one hundred, and to pass in succession over the whole, for the benefit of variation. Another,—1, wheat, and millet after ; 2, common maiz ; 3, wheat and millet ; 4, common maiz ; 5, rye and quarantino ; 6, common maiz ; 7, rye and quarantino ; 8, common maiz. The assiduity with which they avail a fallow, deserves attention ; and it is here effected, as in the south of France, by means of a plant that is asserted by many to exhaust.

Lodizan.

1, Wheat, sown in October and reaped in June, and the land ploughed thrice, and manured for, 2, wheat again, and clover, called *spianata agostano*, which is fed till the following spring, but sometimes ploughed the end of autumn ; 3, flax ; 4, millet. Another course, called *coltura maggenga*,—1, break up the

layer for flax; 2, millet; 3, maiz; 4, wheat, the stubble of which remains in *spianata agostano*.

Cremonese.

1, Wheat, sown in October, and reaped in June, the stubble ploughed thrice for, 2, wheat, upon which sow clover the end of February; 3, clover, ploughed in November for, 4, flax, and then millet; 5, maiz; 6, wheat.

Carpianese.

1, Maiz; 2, wheat sown in the spring with clover, which is mown with the stubble, and remains *spianata agostano*; 3, clover; 4, flax, and then millet; 5, rice; 6, rice; 7, rice.

VENETIAN STATE.—*Bergamo.*

The land here is constantly cropped;—1, wheat; 2, clover, mown in the spring once, in time for maiz; 3, wheat; 4, clover. Also,—1, clover, or millet; 2, maiz; 3, wheat. By which courses they have half or a third of their land in wheat every year.

Brescia.

1, Wheat, and 20 lb. of clover-seed in March, per jugero,—the clover cut in August with the wheat-stubble, and then pastured; in winter dunged:—2, clover, called this year *prato grasso*, cut thrice; first in May, called *il maggiatico* second in August, called *l'ostano*; third in September, *il navarolo*:—3, in March sow flax, which is gathered in June; then plough and sow *quarantino*, amongst which, at the second hoeing, sow lupines for manure:—4, plough in the lupines and sow wheat in November, which is reaped in June; cut the stubble immediately, and sow lupines or coleseed for manure:—5, plough in October, and sow wheat mixed with rye; reaped in June, and then sow part with *quarentino* and part with panic:—6, if a crop of coleseed is taken, it is sown amongst the maiz while growing, which cole is ripe in spring, in time to clear the ground for manuring and sowing the common maiz; if cole not sown, remains fallow in winter, and sow *melica* in spring,—the great millet.

Verona.

Here, as in all other parts of Lombardy, the land is never fallowed;—1, maiz, called *grano turco*:—2, wheat, and, when reaped, millet, or *cinquantino*; this is the *quarantino* of the Milanese:—3, barley or oats, and, when reaped, some other second crop. Wheat is always sown after maiz, and that after barley

or

or oats. No clover used here, except in rice-lands. In the rice-grounds,—1, wheat, reaped time enough for a crop of cinquantino; 2, maiz; 3, clover; 4, rice, &c. &c. Beans are also sown instead of maiz, and wheat after them, and prepare for wheat much better. On the dry lands, such as about the Lago di Guarda, &c. no clover, as the land is not good enough.

To Vicenza.

No fallow any where. There is a little clover, and very fine, but the quantity is small: all wheat and maiz, and scarcely any thing else.

Vicenza.

Wheat is always sown after clover, and cinquantino after wheat; but nothing prepares so well for that crop as beans, so that they are called the mother of wheat, *madre della formento*. This idea, in Lombardy, is as old as Gallo, who remarks, that wheat succeeds after nothing better than beans, which *in grassano maggiormente la terra, che non fa ogni altro legume**; and this he refers to as a custom of the Cremonese and the Mantuans. It is equally true in England; and such a combination of authority ought to convince such as yet want conviction, of the utility of beans as a preparation for wheat; more, perhaps, to be depended on than any other preparation whatever. A common course near this city, introduced as a variety, is,—1, maiz; 2, wheat and cinquantino. A farmer cultivated a field, during some years, in this course,—1, maiz; 2, wheat; 3, clover: and to preclude the necessity of dung, he used only the *vanga* (spade): for five years his crops were good, but afterwards declined greatly, till he could not get even clover. They sow wheat in October, and the clover-seed over it in March, if there is rain; the end of June the wheat is cut; the end of August the clover is mown for hay; and another small crop again in October: here is, therefore, within a year, one crop of wheat and two of clover. The grass is cut again in May, or beginning of the following June; a second time in August; and a third growth ploughed in for wheat, which is usually a very great crop in this husbandry.

Padua.

On all sorts of land, the most usual husbandry is,—1, dung for maiz; 2, wheat; 3, wheat, and then cinquantino or millet, &c. Clover is sown both in autumn and in spring; if the frost is not very severe, autumn is best, but spring the most secure. It is cut once after the wheat is reaped.

* *Le Venti Giornate dell'Agricoltura. Brescia, 1775. 4to. P. 59.*

Venice.

Sig. Arduino assures me, there is no fallow to be found in any part of the Venetian territory; they have not even a word to express the idea—*l'anno di riposo*, is a different thing, and always means clover, or a state of rest, without any tillage. That gentleman's expression pleased me much,—*La jachere è una sciocca pratica in agricoltura*. The two great points on which the best agriculture of the Venetian State turns, are maiz on clover, and wheat on beans. All these plants are equally necessary upon a farm; and there is a peculiarity in clover, as a preparation for maiz, and equally in beans, as preparatory for wheat.

Bologna.

In a very rich field near this city, which I viewed, the course has been, in 1787, wheat, which produced 100 corbi, or twenty times the seed. In 1788, hemp 5000 lb. In 1789, it is now wheat, and perfectly clean. This course, of—1, hemp; 2, wheat, is, perhaps the most profitable in the world,—and brings to mind the noble vale of the Garonne, under the same management. If land will do for hemp, they never fallow, but have some fields in the course, —1, fallow; 2, wheat, which ought to be considered as a disgrace to Lombardy. 1, Maiz; 2, wheat, is a course not uncommon. On the fallowed lands they sow beans, provided they have dung. Very little clover, preferring fenugreek, which is succeeded by wheat. Vetches they sow in autumn, and beans also, both for a crop, and also to plough in, in the spring, as a manure for hemp. With equal quantities of manure, beans give better wheat than hemp. Beans, on Sig. Bignami's farm, are now (November) six inches high on the tops of narrow ridges, but none in the furrows; these are for a crop, and infinitely too thick, I should apprehend. Lupines also, for ploughing in.

TUSCANY.

In the Valdarno di Sura, Colini, Sienisi, Pisani, Volterrana, they fallow, and their course is,—1, fallow; 2, wheat. After travelling so long in Lombardy without a fallow, it hurt me to find them common here. Clover is usually made a preparation for maiz in most parts of this country; and beans, where sown, are reckoned the best for wheat. At Martelli, &c. the course is, —1, beans, French beans, or maiz; 2, wheat; 3, wheat; 4, wheat and rye, and no after-crop. In the Valdichiana, the following course, I am informed, is pursued,—1, maiz and French beans; 2, wheat, and nothing after it; 3, wheat and then raves,—and, in some places, clover added. At Villamagna, the course is,—1, *biade*, vetches, beans &c.; 2, wheat; 3, wheat; 4, wheat.

The

The first wheat produces nine or ten times the seed, if after beans; the second six or seven; the third three or four: —a degradation that ought to explain fully the absurdity of such a system. In some districts the following is the course, —first year, biadi, viz. beans, pease, chick-pease, French beans, tares, lentils, oats, maiz, the great millet, small millet, panic in part, clover and oats, and, after cutting for forage, plough for some of the above. Second year, upon the land thus prepared, wheat is sown, called *grosso* and *aristata* mucked; or with half *grosso* and half *gentili* (white wheat). Third year, gentili wheat.

MODENA.

The bad farmers in the Modenese are fallowists, and their course is,—1, fallow, ploughed first in May or June, in August the second time, and the third in October, for sowing, 2, wheat. But the better farms substitute beans, French beans, vetches, spelt, maiz, particularly the last instead of a fallow. Upon soils that are very good, and manured, they have an execrable custom of taking three crops of wheat in succession; sometimes throwing in clover with the wheat, which is ploughed up in June for wheat again. When beans are sown in autumn, and stand the frost, they yield much more than spring sown.

The husbandry practised by Sig. Bertolini, which is the best of the country, is,—1, beans, sown in October, and harvested in May: then French beans, or formentoni, for forage, or thick-pease, or lentils; 2, wheat, the stubble ploughed thrice for, 3, wheat; 4, maiz, sown in March. To Reggio they fallow some of their land every third year; but more commonly substitute maiz, beans, or something else in lieu.

PARMA.

In the country about Vicomero, the common course is,—1, beans; 2, wheat; 3, maiz; 4, wheat.

PIEDMONT.—*Tortonese*.

A common course here, is,—1, beans; 2, wheat. Also,—1, melga, (great millet); 2, wheat. But they have some lands in fallow courses.

SAVOY.

At Laneshburgh, the common husbandry is that of a crop and a fallow: they plough in May or June, and again for the seed in August, when they sow the rye; and they have no wheat.

From these notes it appears, that there is something both to commend and to condemn in these Italian courses. The rejection of fallows is pretty general; this is a good feature, and the great stress they lay on beans, as a preparation for wheat,

wheat, cannot be praised too much. On the other hand, there seems to be no idea of so proportioning the crops of a farm, as to make cattle and sheep (kept on arable land) the preparation for corn: the culture of clover is not unknown, but scarcely extends further than to produce some hay. I no where met with artificial grasses introduced on so large a scale as to support a good flock of sheep. In some districts, the great plenty of watered meadow explains this deficiency; but there are more where it will not afford an apology. This objection, however, does not hold good in the Lodizan, where their immense dairies are supported on arable land, and certainly form one of the most curious systems of husbandry that are to be met with in Europe.

SECT. II.—OF SEED AND PRODUCT.

That reader who thinks slightly of the use of collecting a great mass of facts in these inquiries, has not, it is to be presumed, reflected sufficiently on the great importance, in every science, of combining circumstances apparently unconnected, in order for mutual illustration. He who collects such facts, insulated for a time only, may not live to see the effect of such comparisons; but the gradation of knowledge is preserved without interruption, and the uses will undoubtedly be discovered.

Savigliano.

They reckon here, that a farm of 100 giornati, one-third watered meadow, should yield 2300 liv. clear of taxes, landlord's half.

PIEDMONT.—*Turin.*

Products of Sig. Briolo's farm:—Wood, eight giornata; meadow, four; wheat, five; rye, five; maiz, five. Yields to the proprietor, for his half,

Ninety mines of wheat, at 3 liv. 10s.	-	315 liv.
One hundred and five ditto of rye, at 2 liv. 15s.	-	236
One hundred and forty ditto of maiz, at 2 liv.	-	280
Wood cut, at seven years growth,	-	71
Vines planted about the farm, 45 brenta of wine, at 5½ liv.	-	247

For landlord's half,	-	1149
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Total, 2298 liv.

Wood, 71

2221 liv. product of nineteen giornata of arable and meadow, or 116 liv. per giornata (about 6l. per English acre); which is a very large produce. There are

are also mulberries enough to pay taxes; this land cost 750 liv. the giornata, and the wood 250 liv.

MILANESE—*Milan to Pavia.*

The crops are—Wheat, seven or eight feeds.—Rye, eleven feeds.—Maiz, forty feeds.—Ditto quarantino, twenty feeds.—Millet, fifty feeds.

WHEAT.

PIEDMONT—*Chentale.*

A proverb in this country is, that a good peasant should finish his wheat sowing by the 19th of October. After hemp, clover, or fallow, wheat yields forty to forty-five mina per giornata, each mina 45 lb. to 52 lb. average 47 lb. and the common price 3 liv. to 3 liv. 10s. but at present 3 liv. 15s. But, including good and bad farmers, and all soils, the produce is not more than twenty-four mina; that is, twelve for the landlord and twelve for the tenant. They sow four to four and a half; the common produce is, therefore, six times the seed, which is miserable; the better crops between ten and eleven feeds. Allowing for the Piedmont pound, being about one-tenth heavier than the English (though only of 12 oz.), and that the giornata is not equal to an acre, their best crops, at forty-two or forty-three mina, will be near five quarters per English acre; and their average near three; which are not greater than might be expected. Their quantity of seed appears, however, to be immense, for it amounts to 199 lb. per giornata, which is extravagant: and makes it suspicious, that the giornata here is larger than the legal giornata of the principality.

Savigliano.

They sow here, of wheat, $3\frac{1}{2}$ eymena, and reap eight times as much, in a good crop.

Turin.

They sow five mina, or nine rabbii, and 10 lb. to the giornata; of rye and oats, the same quantity; of hemp, three mina; maiz, one-half; millet, one-half. Wheat produces twenty-five mina; or five times the seed; rye, thirty; maiz, fifty to seventy; millet, twenty. The mina at 45 lb. the crop of wheat is about $5\frac{1}{2}$ coombs per English acre. For their land and climate, a miserable crop; but as good, or better, than they deserve, when their course of crops is considered.

MILANESE—*Mozzata*.

Produce of wheat, eight stajo per pertica on the best land ; five on middling ; and three on the worst.

There is a singular neglect in keeping wheat in this country : being shewed the granaries at two houses, in which the quantity was considerable, I was surprized to find, that where some of the windows were open, the room stunk very much ; the scent particular ; and examining the wheat, I found the surface all either covered, even to shining, with the webs of the wevils, or else in ropes, hanging together by it, and the flies busy ; the wheat was two or three feet thick, and had not been stirred. In a third granary, to which I went for satisfying my curiosity, in the hands of the owner (for the other two belonged to noblemen, and were managed by intendants,) I found in the same condition ; and all agreed, that to stir the wheat is bad, as it makes the whole heap alike : whereas, by not moving it, the surface only suffers. On this, I thrust my arm into the heap, to examine the interior, which all stunk dreadfully. Perhaps, neither the wevil, nor any other insect, may live deep in the heap ; but, for want of airing, the wheat stinks ; not to mention the surface, which is a loss of 5 or 6 per cent. A most barbarous system of management. It is worth remarking, that the only good way of keeping wheat is in the straw : stacks should be built on cap stones, to keep vermin out, and the corn threshed as wanted.

Mozzata.

The product here, on the three divisions of soil, are, per pertica, the measure the stajo,—

		Good.		Middling.		Bad.
Wheat	-	8	—	5	—	3
Rye	-	8	—	5	—	4
Millet	-	8	—	5	—	3
Common maiz,		10	—	6	—	4
Ditto Quarantino,		6	—	4	—	2
Lupines,	-	8	—	6	—	4
Panic,	-	6	—	4	—	2

Clover hay, 350 lb. of 28 oz. per pertica,

at 3 mowings ; 1½ ton per acre. In money

by corn, without mulberries or vines, 24 liv.— 15½ — 9½

For the landlord's share, I suppose. And, in respect to the country in general, if four square miles be taken around Mozzata, of six parts, three are good, two middling, and one bad. Average corn produce, 18½ liv. The common notion is,

is, that two-thirds of the gross produce go towards maintaining the farmer, supporting the cattle, wear and tear, taxes, &c. and that one third is nett to the proprietor.

	<i>liv.</i>
Produce of 100 pertiche, at $18\frac{1}{2}$ liv.	1850
Vines, proprietor,	150
— tenant,	150
	<hr/> 300
Mulberries, 2000 lb. leaves, at 4 liv, per hundred,	80
	<hr/> 2230
Deduct one-tenth of corn product, damaged by vines,	185
	<hr/> 2045
Deduct one-eighth of corn, for damage by hail; the produce of vines is nett, this is allowed for,	209
	<hr/> 1836
Total nett produce,	1836
Hence, therefore, it does not quite reach $18\frac{1}{2}$ liv. on the average	

Proprietor—one-third of corn,	555
— vines,	150
— mulberries,	80
	<hr/> 785

Or, per pertica, $7\frac{1}{2}$ liv. (31s. per English acre, *)

Such land would sell for 145 liv. per pertica (28l. 16s. per English acre).

Codogno.

The seed and produce of the crops here, are,—wheat, sow one stara and reap six times as much; maiz, sow one fourth of a stara, and get twenty for one; millet, sow one eighth stara, and reap six stara; rye, sow one-half stara, [the produce eight stara; rice sow one stjajo, gain sixteen rough, or eight white.

A Bergamasque writer observes, that wheat cultivated with the plough, commonly yields four, five, and six times the seed; but, cultivated with the spade, twelve, fourteen, and sixteen times that quantity †, and this of greater weight; a sure proof of their miserable tillage.

* At 6 1-6th pertica per acre English, corrected from some of the proceeding proportions, from intelligence very lately received.

† Cantuni, *Istruzioni Pratiche intorno al Agricoltura*. 8vo. 1788, Bergamo. P. 16.

Brescia.

Arable products in this vicinity, are,—wheat, three *facchi*, of fourteen *pezè* each *pezè* 25 lb. being about six feeds. The *pezè*, of 25 lb. Brescian, being equal to $14\frac{1}{2}$ French, makes 206 lb. French per sack, or 224 lb. English: the three sacks, therefore, are 672 lb. English, on a *jugero* of four *pertiche*; this is scarcely twelve bushels the English acre, reckoning four one-fourth *pertiche* in that acre *. Maiz, sown in March, produces six, eight, ten *facchi*, each twelve *pezè* of 25 lb. This is about twenty-eight bushels to the English acre, supposing a bushel of maiz to be 50 lb.; but *quarantino* does not yield more than five such sacks. Melico (the great millet), fifteen *facchi*, of ten or eleven such *pezè*. Flax, six to nine *pezè*, at 20 liv. to 25 liv. the *pezè*; this is about 125 lb. the English acre, and 170 liv. at 6d. English, 4l. 5s. and per English acre 4l. Millet gives three *facchi*, of eleven *pezè*. Clover, three hundred *pezè* of hay, at three cuts; meadows yield the same as clover, but are pastured in autumn. Price of hay 70 liv. the *carro*, of one hundred *pezè*. Three hundred *pezè* equal 4827 lb. English, and per English acre, 4522 lb. which we may call grossly two tons; a very poor crop for three mowings.

To Verona.

In this line of country, the Lombardy system, of planting all the arable lands with rows of pollards, for training vines, is at its height. There is a good deal of it from Bergamo to Brescia; and some are seen in passing from Vaprio to Bergamo, but not so universally as here. It is a most singular system; rows of maple, ash, or poplar, are planted, from four to seven yards asunder, and rows of vines at their feet, which are trained up those trees, and in festoons from tree to tree; the space is cultivated for corn. They do not seem to approve of a single stem for these pollards so much as several, for they have three or four, about six feet high; cropped every second year, to prevent too great a shade. In some places, mulberries are mixed with these common forest trees: one mulberry, and then two ash or maple. In some rows, beyond all doubt, the vines

* In the new edition of Agostino Gallo, the editors give a line for the length of a Brescian inch (*oncia*) ————— which is the length of $1\frac{5}{8}$ inch English. Twelve of those *oncia* make one *braccio*, and six *braccia* make one *cavezzo*; consequently there are $9\frac{3}{4}$ feet in a *cavezzo*. A *pertica* is an oblong square, twenty *cavezzi* long and five wide; now multiply $9\frac{3}{4}$ by 20 = 195; and multiply $9\frac{3}{4}$ by 5, = $48\frac{3}{4}$; and the one product by the other, = $9506\frac{1}{4}$ square feet for a *pertica*; and $4\frac{1}{2}$ *pertiche* equals an English acre; perhaps the editors of that new edition have made an error, in stating 30,709 French feet in their *jugero* of 4 *pertiche*.

are trained equally on the mulberries as on the other trees; but not generally, being fastened only to the stems of the mulberries. The better the land, the farther asunder are these rows, even to sixty or seventy feet; but, in worse land, much nearer. All the way, the soil is a stoney gravel, of a different appearance in quality, but where holes are dug for trees, it looks better.

Verona.

Wheat here yields five or six times the seed. They sow one hundred Veronese pounds upon a campo of land, and reap five hundred and fifty, which is about two bushels of seed per English acre, and the produce eleven bushels. We have not, upon the poorest lands in England, so wretched a crop: to what are we to attribute it, if not to general bad management, united with the execrable system of incumbering their fields with pollards and vines. They steep their wheat seed in lime-water twelve hours, to prevent the smut.

Vicenza.

The thirty-two miles from Verona hither, are all, except a small quantity of irrigated land, lined into the same rows, as already described, from twenty-five to thirty yards asunder. Wheat is sown close under them; but with maize, six yards are left on each side not cropped; and, in some pieces, those twelve yards are sown thick for forage, as not equally wanting sun; a sure proof that they admit the damage of the trees, and provide against it as well as they can. In some grounds preparing for wheat, manure is spread as far as the roots of the trees extend, but no further. What a system, to give dung to elms and maples, and to force wheat to grow under their shade!

Wheat has now (October 23) been sown a month or six weeks; it is high, and thick enough to hide a hare. The borders of these sown lands are dug clean away, as deeply as in Essex.

Maize produces about nine one-half sacchi the campo. Inquiring here into the estimated damage resulting to corn from the plantations of trees in arable land, I was told, that the loss in one-tenth of wheat, and one-half of maize, but to clover none. The trees here are all walnuts, for training vines to, the damage done by them, agreed to be very considerable. Of wheat they sow three stari, and the produce eighteen to twenty; of maize one, and the crop thirty to thirty-five; of cinquantino, half a stara, produce sixteen; of buckwheat one-fourth, the return six. In the farms around the celebrated Rotunda, maize produces five sacks, each of 150 lb.: a sack is four stari, and the stara about three pecks; this is fifteen bushels, and not sixteen, the acre. They are sometimes troubled with the smut; Sig. de Boning, President of the Academy
of

of Agriculture, has tried liming and lime water, as a prevention, but without any success. Of maiz they have a new sort, that carries a male flower on the top of the cone, and this sort always fills with grain to the very point, which is not the case with other kinds.

In respect to the exhausting quality of crops, they reckon that the maiz which carries the flower at top takes most from the land: 2, millet: 3, common maiz: 4, wheat. It seems remarkable, that they should consider the crops which are preparatory to wheat as exhausting, more than the wheat itself.

Padua.

Of wheat they sow three staji in middling land, two in fertile soils, and four in bad ones, per campo: as the stajo is equal to forty-one French pounds, and the campo about one-tenth less than an English acre, it makes three staji equal to two and a half bushels per acre, which is pretty exactly the quantity we use in England. The crop is two mozzi on the best land, and one and a half on a medium: each mozzo twelve staji: this is about fifteen and a half bushels the acre or under seven times the seed. Thus these wretched products pursue me through all Lombardy. Of maiz they sow three quarti, or three-fourths of a stajo, but if planted, two: the produce, good five mozzi, middling three, bad one. Of lucern (the quantity very inconsiderable) and of clover they sow 12 lb. *grosso*. This pound is to the French one as 9150 is to 9216; this is between 14 lb. and 15 lb. per acre. Clover gives three carri, each 1000 lb. at three cuts. Lucern four carri, at four or five cuts. Almost the whole country is lined into rows of pollards, as already described; yet they admit that every sort of tree does very great damage to all arable crops; but to graze the mischief is not great.

To Venice.

The same level at this city that reigns about Padua, equally enclosed and planted; much of it arable, and almost the whole cut into little scraps of fields, with many gardens. Near the Adriatic, a dead level marsh, covered with marsh grasses.

ECCLESIASTICAL STATE.—*Bologna.*

In a famous field near the city, remarkable for yielding great crops of hemp, wheat yields one hundred corbes for five of seed. In general, they sow two and a half tornature of land, or one acre and a quarter, with a corba of seed, or 150 lb. to 160 lb. (something under the English pound); and in all the Bolognese, on an average, the produce is about five feeds, some only three; but

on

on the best hemp lands twelve to sixteen, on a medium; but twenty for one are sometimes known.

TUSCANY.—*Florence.*

In the plains, the general produce is eight times the seed; the whole dutchy through, not more than five or six: in the deposits of rivers, or spots remarkably rich, twelve, fifteen, and even twenty. All these are wheat. Beans four and a half and five. On one stioro of land they sow three-fourths of a stjajo of wheat, which weighs 52lb. to 55lb. of 12oz. (this pound is equal to three quarters of a pound English.) On the hills they sow one-fourth more. Supposing the stiora * to be, according to De la Lande, 7056 French feet, about $5\frac{1}{2}$ make an English acre; three-fourths of a stjajo therefore per stiora, equals 165 lb. per acre, or very near three bushels.

* There are three accounts before me of the contents of a Tuscan stiora. Monf. De la Lande, tom. ii. p. 314. says, "le stiora = 196 toises quarrés en superficie;" these are French toises, each six feet: this makes about $5\frac{1}{2}$ stiori to an English acre; that is to say, 7056 French square feet, of which 38,300 are an acre. In *La Squadra mobile P Arithmetica e P Agricoltura*, del S. Sangiovanni, 4to, Vicenza, 1759, p. 11. and 132. is the measure of the foldo of Florence, which equals 1 $\frac{1}{8}$ -inch English; the braccio is 20 soldi, or $22\frac{1}{2}$ inches English, (by another account $23\frac{1}{2}$; 6 braccia make a canna: and 8 canne long, by 6 broad, make a stiora. Hence there are 6075 English feet in the stiora; consequently there are something above 7 stiori in an acre. Monf. Pauton, in his *Metrolgie*, p. 794, compares it to the arpent of France of 48,400 French feet, and makes it to that arpent as 0.11461 to 1.0000; by this account it will be about 27,800 French feet, of which feet 38,300 are an acre, or above 1 $\frac{1}{3}$ -third stiora. In the *Giornale Fiorentino di Agricoltura*, 1786, p. 253. "L'acre al nostro stioro stà come 18,992 a 10,592;" by this ratio, an acre is about $1\frac{1}{4}$ stiora. All these accounts differ therefore greatly. To compare other circumstances---At Martelli, they sow one-third of a stjajo of wheat seed on a stiora; and at Villamagna, they sow $3\frac{1}{2}$ stiori with 1 stjajo, which quantities nearly agree. By De la Lande's account, this will be per acre English 73 lb. which appears to be a smaller quantity than any where used. By Sangiovanni, it will be about 94 lb. still under the common quantities. By Pauton, it will be about 17 lb.; a portion not to be named as the seed of an acre. And by the Florentine author, about 23 lb. which is almost equally absurd. Seed wheat will agree with none of the measures; suppose they sow $2\frac{1}{2}$ bushels per acre, then there are 15 stiori in an acre. If 2 bushels, then there are 12 stiori. All is confusion.

At Villamagna, they sow 24 stjaji of beans on 28 stiori of land; this is about 3 bushels English per $5\frac{1}{2}$ stiori, which agrees very well with an acre being $5\frac{1}{2}$: they sow also 6 stjaji of oats on 10 stiori, this would be 2 bushels on 5: they sow oats therefore rather thinner, proportionably to the English practice, than beans.

Upon my getting a friend to write to Tuscany for information, I received such as proved of no use; simply this table,---1 quadrato, 10 tavole; 1 tavola, 10 pertiche; 1 pertica, 10 decche; 1 deca, 10 braccia squadra. This makes the quadrato under 40,000 feet English. But what is the stiora? Such are the endless difficulties in every thing concerning measures.

Where authorities, apparently good, differ so greatly, the reader will of course receive all estimations with many doubts.

But

But I found at Martelli, near Florence, that they sowed but one-third of a stajo per stiora, which would not be more than two bushels per acre. Beans would be much more cultivated, but for the pernicious plant the *cuscuta*—a parasite that feeds on and destroys the crop, so that even the seed again is not reaped; in the old botany called *orobanchis ramosa*, and in Tuscany *succa mala*, and *fiamini*. Of saggini they sow $1\frac{1}{2}$ stajo of seed, and the produce fifty to sixty. Of formentone (maiz) they sow half a stajo, and reap twenty-five.

On the plains in Tuscany, the chief product is wheat, the second wine, and the third oil; but on the southern side of the hills, olives on spots bad for them, and wine. Silk no where enough to be a chief object.

MODENA.

The country from Modena to Reggio constantly improves in its features, and must be reckoned among the best cultivated in Lombardy; the fields are thrown into arched lands, like Flanders, about twenty-five yards broad, and small ridges on those: a row of trees is planted on the crowns of some, and along the furrows of others: in some there are neat grass trenches; and as the fences are equally well made, and the meadows with a good aspect, the country carries the general features of being well cultivated. The appearance of these broad ridges, in two of the best cultivated countries in Europe, Lombardy and Flanders, justly gives a high idea of the practice.

PARMA.

From Reggio to Parma, there are many lands, three or four yards broad, now (November) deeply ploughed, and the furrows cleaned out by spades, laid up in this manner, for planting beans in the spring; excellent management. There are also a good many autumn sown ones, three or four inches high: produce in general, about Vicomero, wheat four or five times the seed, and beans five or six. To Firenzuola this practice takes place yet more, and is better done. The merit of their husbandry appears to be greater about Parma than at Piacenza; there is a visible decline as you advance.

SAVOY.

At Lanesbourg, they sow only rye, which they harvest in July, the produce about six for one.

If the intelligence concerning the produce of wheat be reviewed, it will be found, on an average, varying from five to seven and an half times the seed; generally between five and six. Suppose the latter number, and we shall, with reason

reason, be amazed at the miserable products of this rich plain, in every thing except grafs and filk. The average foil of England cannot be compared with the average foil of Lombardy, yet our mean produce is eleven times the feed, perhaps twelve. Every one must be curious to know the cause of such wretched crops: I attribute them to various circumstances—but the predominant cause must be fought for in the small farms occupied either by little peasant proprietors, or, what is more general, by metayers. This abominable system of letting land is the origin of most of the evils found in agriculture, wherever the method prevails. Such poor farmers, who, in every part of Italy where I have been, are so miserable, that they are forced to borrow of the landlord even the bread they eat before the harvest comes round, are utterly unable to perform any operation of their culture with the vigour of a substantial tenantry; this evil pervades every thing in a farm; it diffuses itself, imperceptibly to a common eye, into circumstances where none would seek it. There are but few districts where lands are let *to the occupying tenant* at a money rent; but wherever it is found, *there* crops are greater; a clear proof of the imbecillity of the metaying system. Yet there are politicians, if they deserve the name, every where to be found, who are violent against changing these metayers for farmers; an apparent depopulation is said to take place; and the same stupid arguments are heard, that we have been pestered with in England, against the union of farms. Men reason against that improvement of their lands, which is the natural progress of wealth and prosperity; and are so grossly absurd as to think, that doubling the produce of a country will deprive it of its people.

SECT. III.—OF THE CULTURE OF CERTAIN PLANTS.

Gallega Officinalis.

Commonly spontaneous in the fields, between Milan and Pavia, and wherever cattle have admision all closely eaten.

Paliurus.

I know no plant that makes a better hedge than this in the north of Lombardy. Sig. Pilati, near Brescia, has one of six years growth, as good as an excellent white thorn one in England would be in ten.

Trigonella Fœnum Græcum.

Cultivated in the Bolognese in preference to clover; foil with it; and sow wheat on the land.

Sainfoin.

In Tuscany, the *coline di Pisani* are much under this plant, which is called *lupinello*; particularly about Castel Fiorentino, where it was introduced about twenty years ago, by Sig. Neri; one of the good deeds which deserve a nation's thanks, better than a victory, or the taking of half a dozen towns. A thousand sacks of the seed were sent thence to Naples and Sicily. Will those kingdoms awaken at last? Sig. Paoletti, at Villamagna, has a piece of good sainfoin on a steep slope; but I found one-third of it burnet.

Larch.

In the Milanese, at Mozzata, the Count de Castiglioni having 200 pertiche of waste heath, and a community 200 more adjoining, he took a lease of it for ever; and ploughing the whole, sowed acorns, planting alder, larch, and other trees, which do well; but the sown oak, in eight years, exceeded every thing, and are beautiful trees: the soil a poor gravel. We have in England so many prejudices, that a man who does not travel is apt to think that every thing English is better than the same things in other countries; and, among other follies, that for oak England is superior to all the world: but timber wants sun as much as wheat; and I have no where in England seen such a growth of timber, as in many places abroad. Larch abounds greatly in the mountains, and is reckoned an admirable wood for water-works; all posts are of larch. I have read in some writer, that there is a law, in many parts of Lombardy, which allows a land-proprietor, whose estate is entailed, to plant, on the birth of a daughter, a certain number of Lombardy poplars, which are her portion on coming of age, or being married, in spite of any entail. I enquired, both in Piedmont and here, into the truth of this, and was assured there is no such law; nor did they ever hear of the custom, even when estates have not been entailed.

In the arsenal of Venice, is some quantity of larch, kept under cover; and valued greatly for all works exposed to water. They are not very large, but cost twenty-two ducats each. The masts are very fine pine-trees, from the upper Trevisano; I measured one thirty-eight yards long, and two feet diameter at the butt, and one foot at the other end.

Lucerne.

I mention this plant, for an opportunity of observing, how very rarely it is cultivated in Italy: I saw a little near Padua; and there is an inconsiderable quantity in the Parmesan, where it is cut five or six times; they find, that cows give more milk on it, than on any other grass.

Raves.

Raves.

I was somewhat surprized, to find turnips, or rather the French raves (for I fear they are not the genuine turnip), cultivated in Tuscany. I was assured, that in the Valdichiana there are many, sown immediately after wheat, but never hoed, yet come generally from 2lb. to 5lb.; some to 30lb. (20lb. English), and that they are applied to the feeding and fattening of oxen, which sell at 140 *scudi* the pair (39l. 13s. 4d. English); nothing beside is given, except a little hay.

Cyprus Tree.

At Soma, near the Lago Maggiore, there is a very famous cyprus tree, which Corio, in his *Storia di Milano*, says, was the place where the people assembled in congress in the thirteenth century; it was then the most celebrated tree for size and age in the whole Milanese; and must therefore be immensely old at present. It is now in good health, except a few branches that have suffered a little towards the top; it is nine *braccia* in circumference.

CULTURE OF SILK.

Nice.

Eight *roups* of cocoons, or 84 lb. make 24 lb. of filk (11½ oz.), which sells at 10 liv. 5s. the lb.; a *roup* of leaves sells at 20s. and 250 *roup* are necessary for 8 oz. of grain (eggs).

Coni.

The whole country, after ascending the Alps, is planted with mulberries, around every field, and if large, in lines across. I remarked great numbers from ten to fifteen years old.

To Chentale, 1 oz. of grain requires 360 *roup* of leaves; each *roup* 25 lb. and yields 4 or 5 *roups* of *bozzoli* or *cacata* (cocoons), and 1 *roup* of cocoons makes 3 lb. of filk. The price of organzine 20 liv. to 24 liv. per lb.; the offal pays the spinning. Gathering the leaves costs 2s. to 3s. the *roup*.

Chentale.

The seed of the mulberry is sown in nurseries, and the trees commonly planted out at four years old. The first, second, and third year, they are pruned, for giving the branches the right form; the fourth, they begin to gather the leaves. Some which were shewn me by the Count de Bonavent, of eighteen years old,

give 6, 7, and to 8 *rubbi* of leaves each. One old tree, a very extraordinary one, has given 53 *roups*. A large tree, of fifty or sixty years, commonly yields 25 *rubbi*. They never dig around them, nor wash the stems as in Dauphiné; but they have a practice, not of equal merit, which is to twist straw-bands around the stems, to defend them against the sun. For one ounce of grain 65 to 80 *rubbi* of leaves are necessary, which give $2\frac{1}{2}$ *rubbi* of cocoons and sometimes so far as four. One *rubbio* of cocoons yields 20 to 21 oz. of silk organzine, of the price of 18 liv. per lb. For gathering the leaves, from 1*s*. 8 *den.* to 2*s*. the *rubbio* is given. The offal (*moreſca* and *chocata*) pays the winding and spinning. They never hatch the worms by artificial heat; using only that of the sun, or of the human body. The common method of carrying on the business is, to provide, as in France, grain and mulberries, and to receive half the cocoons. The cultivation is so profitable, that there are many lands to which mulberries add a value of 200 liv. or 300 liv. more than they would sell for if they contained none; and it is farther thought, that they are but little injurious to corn, the shade not being so prejudicial as that of the walnut, and of some other trees. The common estimation of profit is, that trees of all ages yield from the time of beginning to bear, from 30*s*. to 4 liv. each nett to the landlord for his half produce.

Turin.

One ounce of grain gives 2 to 4 *rubbi* of cocoons, and demands 120 *rubbi* of leaves; 1 *rubbio* of cocoons will give 22 oz. of commonly well spun silk. The price of grain 12 liv. the oz. when very scarce, but in common 30*s*.; that of leaves 7 or 8*s*. per *rubbio*. Cocoons 21 liv. per *rubbio*. When I asked the price of the silk, the answer was, Oh! for that! it is the price the English choose to pay for it. The common price of organzine, 16 to 20 liv. first quality; raw, 12 liv. For gathering the leaves, 2*s*. per *rubbio* is given. Of the different sorts of mulberry, the wild is the best, in point of quality of silk. A tree of twenty years, will give 24 or 25 *rubbi* of leaves; some to 35 *rubbi*. The trees are grafted in the nursery, and planted out at four years, at the beginning of April; price, 20*s*. to choose out of many; and in four years after, begin to gather. When planted in watered meadows, the gathering damages the hay almost to the value of the leaves, yet many are so planted; and many peasants think they lose in corn by the shade of the trees, as much as they get by them. From the 22d to the 26th of April, is the season for hatching; never by fire; nor have they any method of retarding the hatching, in case of a want of leaves. Endive, lettuce, and elm leaves, have been often tried as a succedaneum, but always killed the worms; such things must never be depended on. The peasants generally sell the cocoons, not one in a hundred spinning. A chamber of twenty feet by
twelve

twelve feet is necessary for 3 oz. of grain ; and six tables, one *trebucco* long and two-thirds wide.

Novara.

Passed this place towards Milan, which is a great tract of mulberries for several miles.

MILANESE.—*Buffalora to Manienta.*

Many mulberry hedges, but they are bad and ragged ; some new planted in the quincunx position. For several miles, the country is all planted in rows of vines, at twelve, sixteen, and twenty feet, and fruit trees among them, for their support ; among which, are many mulberries, and the vines running up them. This must be a most profitable husbandry indeed, to have silk and wine not only from the same ground, but in a manner from the same tree. Between the rows, the ground is cultivated ; millet, maize (cut), *bolcus sorgum*, the great millet, lupines, with dung amongst them, to be ploughed in for wheat, with young maize, sown thick, as if for fodder.

Citriccho.

A beautiful mulberry hedge, and in good order ; six to eight inches from plant to plant, and cropt at sixteen or eighteen from the ground. It is clear therefore, that the plant will do, with care, for a good hedge. Towards Milan, mulberries decline, oak and other pollards being found in their stead.

Mozzata.

The culture of mulberries and making silk, being here much attended to, were principal objects in my inquiries. The fruit is well washed, the end of June, to make the seed sink ; it is then sown in rows, in a bed of earth well manured, and finely laboured, in the rich nurseries near Milan ; covered very lightly, and the surface lightly flattened ; straw is spread to defend it from the sun, and much water given. When the young plants appear, they are weeded by hand. The second year, they grow to two or three feet high, and hoed and thinned. The third year, they are cut to the ground above the buds that are to push, and transplanted from those nurseries, in the vicinity of the city, to others that are scattered all over the country, in ground well dug and manured, and at two feet square ; here they are kept clean by hoeing. The fifth year, in the spring, they are cut again to the ground ; they then shoot very powerfully, and attention must be given, to keep but one good shoot, and the ground is dug or hoed deeper than common, and also dunged. The sixth year, those that are high enough, are grafted ; and the rest, the year following. Those that took
the

the sixth year, ought to rest in the nursery three years, including the year of grafting, that is, the seventh and eighth year. They do not like to plant large trees, and have a proverb,

Se vuoi far torto al tuo vicino,
Pianta il moro grosso e il fico piccolino.

As to plant small fig trees is as bad as large mulberries.

The holes are made in winter for receiving them where they are to remain; these are nine feet square and two feet deep, and have at the bottom a bed of broom, bark of trees, or other rubbish; then the best earth that can be had, and on that dung, one load of sixteen feet to four trees; this is covered with more good earth, and this levels the hole with the rest of the field; then prune the roots and plant, setting a pole by the young tree to the north, and a spur post on the other side, to guard it from the plough. Twine no straw the first year, because of the insect *forficula auricularia*, L.; but in November bind straw around them against the cold, or, as straw is dear, the *poa rubra*, which abounds. Never, or very rarely, water. Much attention to remove all buds not tending in the right direction.

The fourth spring after planting, their heads are pollarded, in March, leaving the shoots nine inches long of new wood, and seeking to give them the hollow form of a cup, and that the new buds may afterwards divide into two or three branches, but not more. The next year, they begin to pluck the leaves. They are attentive in pruning, which is done every second year, to preserve as much as they can the cup form, as the leaves are gathered more easily. Thus it is about fourteen years from the seed before the return begins.

After gathering the leaves, a man examines and cuts away all wounded shoots; and if hail damage them, they are cut, let it be at what time of the year it may. Old trees are pruned after gathering, but young ones in March. In autumn, the leaves are never taken for cattle before the 11th of November, as the trees after that time do not suffer. The third year after planting young trees, they sow about a hat full of lupines around the stem, and when about ten inches high, dig them in for manure. The opinion here is, that the mulberry does very little harm to rye or wheat, except that when cut the falling of branches and trampling are somewhat injurious. Maiz, millet, and panic are much more hurt. A tree, five years after transplanting, gives 10 lb. of leaves, each 28 oz. At ten years, 18 lb. At fifteen years, 25 lb. At twenty years, 30 lb. At thirty years, 50 lb. At fifty to seventy years, 70 lb. There are trees that give 80 lb. and even 100 lb. The price of leaves is commonly 4 liv. per 100 lb. (28 oz.). For one ounce of grain 500 lb. of leaves are necessary, and yield 17 lb. of cocoons; but among the risings in the mountain of Brianza, 25 lb. To make a pound of silk, of 12 oz.

5 lb.

5 lb. or 6 lb. of cocoons, of 28 oz. are required. Price of cocoons, in the low watered country, 2 liv. per lb. (28 oz.). At Mozzata, $2\frac{1}{2}$ liv. At Brianza, 3 liv. The grain is hatched in a chamber, heated by a chimney, and not a stove, to 17 deg. of Reaumur ($70\frac{1}{2}$ Far.); but before being placed in this chamber, they are kept eight days under a bed, with a coverlet upon them, in boxes covered with paper pierced: and when hatched lay the young leaflets of the mulberries on the paper, to entice them out. The method of conducting the business here is the same as in France, the landlord furnishes half the grain, and the peasants half, and they divide the cocoons. Price of grain, 2 liv. the ounce. Mulberries, of all ages, are pollarded every second year; a mischievous custom, which makes the trees decay, and lessens their produce; it is never done in Dauphiné, where the culture is so well understood.

Milan.

Sig. Felice Soave made some interesting trials on silk worms.

At Lambrate, near Milan, 2 oz. of seed in rooms, kept to the heat of 23 and 24 deg. Reaumur, hatched well, and kept healthy: the 28th of April, the seed was placed in the rooms, and hatched in the third, fourth, and fifth day: the 21st of May, the first cocoon seen, and at the end of the month all were at work. The product gathered the 3d of June; the product $92\frac{1}{2}$ lb. cocoons (28 oz.); eighty-four of them having been spun from four and five cocoons, gave $20\frac{1}{2}$ lb. (12 oz.) of silk, stronger and more shining than common: the consumption of leaves, 1420 lb. of 28 oz. Wood used for fire, 2800 lb.; but the two rooms would have served for 4 oz. of seed. In the common method, without stoves, the consumption of leaves is 500 lb. for an ounce of seed, and the medium product is not above 15 lb. of cocoons; and by this new method, the consumption of leaves has been 710 lb. each ounce, and the produce $46\frac{1}{2}$ lb. cocoons. Sixteen or seventeen cocoons weigh an ounce in the common method, but in this only thirteen or fourteen. The silk cannot commonly be spun from five or six cocoons; these were spun easily from four or five, and might have been done from three or four. To gain a pound of silk, in common, 5 lb. of cocoons are necessary; but here the same quantity has been gained from 4 lb.

Lodi to Codogno.

In this dead level and watered district, there are very few mulberries; none except near the villages; many of them, not all, appear unhealthy; perhaps by reason of their not exerting the same attention as in Dauphiné, where there is, in irrigated meadows, mounds made to keep the water from these trees.

Codogno.

Codogno to Crema.

Mulberry trees here have large heads, as in Dauphiné, instead of being pollarded incessantly, as to the north of Milan.

There is an idea in the Milanese, that silk was introduced by Ludovico il Moro. Francesco Muralto reports, “*Prædia inculta infinita duobus fluminibus ad novalia (Ludovicus), reduxit infinitas plantas Moronum ad conficiendas fetas, seu sericas plantari fecerat et illius artis in ducatu, primus fuit auctor* *.” It is said to have been introduced into Europe by some Basilian monks, from Sirinda, a city of Indostan, to Constantinople, under the Emperor Justinian, in the year 550, by one account †; and by another, in 525 ‡. In 1315, the manufactory of silk was brought in Florence to great perfection, by the refugees of Lucca ||; but during the fifteenth century, no silk was made in Tuscany; for all used in that period was foreign, silk worms being then unknown §. In 1474, they had eighty-four shops that wrought gold and silver brocaded silks, which were exported to Lyons, Geneva, Spain, England, Germany, Turkey, Barbary, Asia, &c. ** Roger I. King of Sicily, about the year 1146 ††, having conquered some Grecian cities, brought the silk weavers from thence into Palermo; and the manufacture was soon imitated by the people of Lucca, who took a bale of silk for their arms, with the inscription—*Dei munus diligenter curandum pro vita multorum* ‡‡. In 1525, the silk manufacture at Milan employed twenty-five thousand people; and it seems to have augmented till 1558 |||. In 1423, the Republic of Florence took off the duty of entrée upon mulberry leaves, and prohibited the exportation; and some communities of Tuscany have records concerning silk anterior to that period §§.

In almost all the districts of the Milanese, mulberry trees are met with, very old, with towering branches; among which are those of Sforzesca, planted under Ludovico il Moro *†, who lived at the end of the fifteenth century.

VENETIAN STATE.—*Vaprio to Bergamo.*

There are many mulberries, mixed with the cultivation of corn and vines, in this tract of country.

* *Atti Società Patriotica*, vol. ii. p. 220. † *Saggio sopra la Replicata Raccolta della Foglia del Gelfo*, 1775, p. 1. ‡ *Dizionario del Filugello*, 12mo, 1771, p. 43. || *Ragionamento sopra Toscana*, p. 49. § *Decima*, tom. ii. sez. 5. cap. 4. ** *Benedetto Dei*. †† *Giannone Storia Civ.* Y. ii. lib. 11. cap. 7. p. 219. *Giulini*, tom. v. p. 461. ‡‡ *Saggio*, &c. p. 56. ||| *Opusc. Scelte*, vol. vii. p. 12. *Bartolozzi*. §§ *Corso di Agricoltura Pratica*. *Lastri*, tom. i. p. 285. *† *Elementi d'Agricoltura*. *Mitterpacher*, tom. ii. p. 513.

Bergamo.

Four ounces of seed are here given to each poor family, which yield four *pesi* of cocoons.

Brescia.

One hundred *pesi* of leaves are necessary to 1 oz. of seed; and four *pesi* of *bozzoli*, or cocoons, are the produce of 1 oz.; and the *peso* of cocoons gives 28 to 30 oz. of silk. Cocoons sell at 45 liv. per *peso*. Leaves at 1 liv.; and silk at 22 liv. to 24 liv. per lb. The trees are lopped every three years; yet some are known that give 20 *pesi* of leaves. Small ones half a *peso* and one *peso*.

Verona.

One ounce of seed demands seventeen or eighteen *facchi* of leaves, each one hundred Veronese pounds (or 74 lb. English). Twelve ounces of seed are given to each family; and each ounce returns 60 lb. of cocoons, at 12 oz. the lb.; the price 24*s.* the lb. To each ounce of seed sixteen to eighteen *facchi* of leaves, each 100 lb. of 12 oz. are necessary. The 60 lb. cocoons, at 24*s.* are 72 liv. or 36*s.*; which is the produce of eight trees, or 4*s.* 6d. a tree, the half of which is 2*s.* 3d. It must however be remarked, that these prices of cocoons vary so much, that no rule can be drawn from them: this price of 24*s.* the pound is very low, and must arise from some local circumstance. One ounce of silk to one pound of cocoons. They are here, as in the preceding districts, in the custom of finding the trees, and half the seed, and the peasants the rest; and they divide the cocoons. A tree of forty years old will give four *facchi*; and if a plantation consist of one thousand trees, they will, one with another, give two *facchi*. They make silk in the Veronese to the amount of a million of pounds of 12 oz. There are, near the city, some trees in a rich arable field seventy years old, that yield from four to six sacks of leaves each; this is about 10*s.* a tree, at the lowest price of cocoons.

To Vicenza.

There are many rows of mulberries in the meadows, that are never dug around, and yet quite healthy, which proves that they might be scattered incessantly about grass lands, if any proof were wanting of so undoubted a fact. In the arable lands, the soil all gravel, they are planted twelve ridges apart. Some of the trees are old, that spread seven or eight yards across.

Vicenza.

The produce of silk amounts here to about 6 liv. the *campo*, over a whole farm; this is about 3s. an acre. The *sacco* of leaves weighs 75 lb. and forty *sacchi* are necessary for one ounce of seed; which gives 100 lb. of cocoons, and 10 lb. of silk. One hundred trees, of twenty years old, yield forty *sacchi*; price 3 liv. to 11 liv.; commonly 3 liv. Price of cocoons 30s. to 50s. the pound.

I was glad here to meet with some intelligence concerning the new silk worm, said to have come from Persia, which they have had here eight years, but is in the hands of so few persons, that I could get none of the seed; and I suspect that it is lost; for, on repeated inquiries, I was referred to other parts of Italy. While they had this worm, they had four crops of cocoons a year:—
1. In the beginning of June. 2. The end of the same month. 3. The middle of August. 4. In October. This worm is essentially different from the common ones in the circumstance of hatching: no art will hatch the eggs of the common sort the first year, that is the year of the flies dropping them; they can be hatched the year following only; but of this new sort, the eggs will hatch in fifteen days the same year, if they be in the proper heat. But it is to be observed, that they use this sort of worm not really to command several crops in the same year, for mulberry trees will not bear it without destruction, but merely as a succedaneum to the common sort of worms, if by frosts in the spring they be lost for want of food; this new sort is in reserve, to apply the leaves to profit once in the year. Theoretically the plan is good; but there must have been something in practice against it, or we may conjecture that after many years the use of them would have been generally introduced.

This will not be an improper place to introduce some remarks on this subject, by an author much esteemed, but quite unknown in England. It appears from the work of Count Carlo Bettoni, of Brescia, that the discovery of the new silk worm arose from experiments made with a view of finding out a cure for the sickness of mulberry trees, called *moria*; this was supposed to arise from stripping the leaves in the spring annually; it was thought, that if some means could be discovered of postponing the gathering much later in the year, it would greatly favour the vegetation and health of the trees; an effect that could only take place by means of a worm that would hatch much later than the common one. In 1765, a second hatching of the eggs of the common worm is said, by the same author, to have been made; part of which were fed with the second growth of leaves, and part with the leaves of trees that had not been gathered in the spring. Those fed with the old leaves gave a greater number of cocoons, and of a better quality than the others. These experiments were repeated by many persons; and it was found, that in the heats of July
and

and August the worms would not do well; but in September much better, and that the trees did not suffer from having their leaves gathered in September. The same author says, that the new worms (which he calls *forestieri*) will hatch three times a year, and that no art will prevent it; no cellars, no cold will keep them from it, though it may retard them some time, as he tried in an ice-house, by which means he kept them inert till August. But, on the contrary, the common sort cannot in general be hatched a second time the same year, even with any heat that can be given; yet he admits, that they were hatched by certain persons in 1765. The new ones sleep four times, like the common ones, but begin to spin their cocoons five or six days sooner: they eat less in quantity, but give less silk; and as this defect is balanced by the advantage in food, they ought not, says the Count, to be proscribed. Their cocoons are small, but the consistency is good and fine; and their silk is fine and softer than the common: he sold it for 4 liv. or 5 liv. a pound more than common silk. There is, however, an evil attends them, which is the uncertainty of their hatching the second and third time; sometimes all the seed will hatch, but at others only a part; even only the seventh and tenth of the quantity: but the first hatching is regular, like that of the common worms. A circumstance in the course of his trials deserves noting, that he found the worms of both the old and new sorts would drink water when offered to them, and that the cocoons were the larger for their having had the water.

They have had a sort in Tuscany that hatches twice a year; and the Count writing thither for information concerning them, found that their silk was coarser than the common, and of less value; and he judges them to be a different kind from his own, which hatches three times. The Count concludes nothing determinate concerning them; but resolves to continue his numerous experiments and observations. As there may be persons who think, as I did at first, when I heard of this sort of worm, that if any succeed in England it would probably be this; it is proper to observe, that Count Bettoni had nothing in view but the diseases of the mulberry trees, and does not seem to have had at all in contemplation the evils attending late frosts, depriving the worms of their usual food; and if the common sort may be retarded in hatching (which he shews) till August, equally with the new sort, there does not seem to be any extraordinary advantage in this sort, for a northerly climate, more than in the others. The Count's book * was printed at Venice in 1778.

Sig. Pieropan has made an observation, which deserves noting; mulberries, and likewise other trees, are generally found to succeed much better when grafted a little before sun-set than at any other time: the reason he attributes

* *Progetto per preservare i Gelsi*, &c. Co. Carlo Bettoni. 8vo. Various passages.

to the heat of the earth after sun-set; he kept a journal some years, of the comparative heat of the atmosphere and the earth, at the depths of four, twelve, and twenty-four inches; and has found, that immediately after the setting of the sun the mercury in those thermometers under ground had always risen some degrees gradually till the rising of the sun, when it as regularly falls.

The following is the Account of the Profit and Loss of Six Ounces of Seed, for Three Years, at Vicenza, by Sig. Carlo Modena.

1778.

<i>Expences.</i>				<i>liv.</i>	<i>s.</i>	<i>den.</i>
<i>Semenza</i> —seed, 6 oz.	-	-	-	36	0	0
<i>Foglia</i> —leaves, 26,475 lb.	-	-	-	1545	4	0
<i>Spesa</i> —gathering leaves and attendance,	-	-	-	868	16	0
<i>Filare</i> —spinning 992 lb. cocoons, which give 159 lb. 5 oz. filk,	-	-	-	557	18	0
				<u>3007</u>	<u>18</u>	<u>0</u>
<i>Produce.</i>						
159 lb. 5 oz. of filk,	-	-	-	4144	15	0
Refuse ditto, 41 lb.	-	-	-	102	10	0
Seed, 55 oz.	-	-	-	330	0	0
				<u>4577</u>	<u>5</u>	<u>0</u>
Expence,	-	-	-	3007	18	0
Profit,	-	-	-	<u>1569</u>	<u>7</u>	<u>0</u>

1779.

<i>Expences.</i>						
Seed, six ounces, half given to the peasants, three ounces,	-	-	-	18	0	0
Leaves, 15,607 lb.	-	-	-	753	9	0
Spinning—the produce 446 lb. cocoons, half of which, 223 lb. to the proprietor, 29 lb. of filk,	-	-	-	101	10	0
				<u>872</u>	<u>19</u>	<u>0</u>
<i>Produce.</i>						
29 lb. of filk,	-	-	-	754	0	0
Refuse ditto,	-	-	-	21	2	0
				<u>775</u>	<u>2</u>	<u>0</u>
Loss,	-	-	-	97	17	0

1780.

1780.—Upon his own account.

<i>Expences.</i>						<i>liv.</i>	<i>s.</i>	<i>den.</i>
Seed, 6 oz.	-	-	-	-	-	36	0	0
Leaves, 370 facks,	-	-	-	-	-	957	13	0
Gathering and attendance,	-	-	-	-	-	1303	12	0
Spinning 910 lb. of cocoons,	-	-	-	-	-	265	0	0
Reducing 118 lb. 6 oz. of filk into organzine,	-	-	-	-	-	451	10	0
						3013	15	0
<i>Produce.</i>								
Refuse filk,	-	-	-	-	-	116	4	0
118 lb. 6 oz. of organzine,	-	-	-	-	-	4325	5	0
Leaves sold,	-	-	-	-	-	28	0	0
Silk kept for own use, 2 lb. 3 oz.	-	-	-	-	-	49	10	0
						4518	19	0
Expences,	-	-	-	-	-	3013	15	0
Profit,	-	-	-	-	-	1505	4	0

This year the profit would have been much greater ; but through the negligence of the women in the night, not attending to the degrees of heat (from 25 to 27 deg. Reaumur), many were suffocated *.

To Padua.

One ounce of seed gives 60 lb. of *galetta* (cocoons), and 8 lb. to 10 lb. of *galetta* 1 lb. of filk : the ounce of seed requires sixteen facks of leaves, of four *pesi*, each 25 lb. ; and twelve small trees yield one sack, but one great tree has been known to yield six facks. Price of gathering, 20*s.* the sack. Expence of making 60 lb. of filk, 250 *liv.* Spinning, 30*s.* the pound. Cocoons sell at 30*s.* to 36*s.* Silk this year, 25 *liv.* the pound, *setile*.

Padua.

One ounce of seed gives in common 30 lb. of cocoons, and 8 lb. of cocoons 1 lb. of filk : twenty facks, of 80 lb. of leaves, are necessary to feed the worms of an ounce of seed. Price of gathering, 20*s.* the sack. The greatest trees give ten facks of leaves each ; a tree of twenty years four or five facks. It is not

* *Opuscoli Scelti*, tom. iii. p. 33.

the general custom to divide this business with the peasants. The common sort of silk worm is hatched about the 25th of April; the others the middle of June; but silk demands a more expensive operation in the latter season.

Venice.

There are three sorts of silk worms:—1. The common one, which casts its epiderm, or sleep as it is called, four times. 2. A sort known at Verona, that casts only three times; the cocoons smaller than those of the other sort. 3. The new sort mentioned by Count Carlo Bettoni, the seed of which hatch two or three times a year; but the others only once. The seed of the two first sorts cannot be hatched the same year it is dropped; but that of the third will hatch of itself, if it be not carefully kept in a cool place.

Bologna.

One hundred pounds of cocoons are made from 1 oz. of seed, and yield $7\frac{1}{2}$ lb. to $8\frac{1}{2}$ lb. of silk, of 12 oz. Price of cocoons, 20 to 25 *baiocca*. Silk, 34 *pauls*, at 6d. the pound.

TUSCANY.—*Florence.*

Making inquiries here concerning the new sort of silk worm, I found that they were not, as I had been before told, a new discovery in Italy, but known long ago; and, what is remarkable, is prohibited by law, in order to preserve the mulberry trees from being stripped more than once. The silk made from them is not more than half as good as the common, and very inferior in quantity also. They assert here, that by means of heat they can hatch the eggs of the common sort when they please, but not for any use, as they die directly; which is not the case with the new species, or that as it is called *di trè volte*.

Their contrivance for winding silk is very convenient, and well adapted to save labour; one man turns, for a whole row of coppers, the fires for those which are without the wall; and the closets with small boilers of water, for killing the animal in its cocoon by steam, are equally well adapted.

At Martelli, near Florence, on a farm of 190 *stiori* (34 acres) there are forty or fifty mulberries, enough for 1 oz. of grain, which gives 50 lb. or 60 lb. of cocoons, and 6 lb. or 7 lb. of silk. Price of cocoons this year, 2 *pauls* the pound; last year $2\frac{1}{2}$; and in 1787 it was 3 *pauls*. In the culture of the trees they do not practise such attentions as the French in Dauphiné; they never dig about them, except when young; never wash the stems; they prune the trees when necessary, but not by any rule of years. The best sort is the wild mulberry, but it yields the least quantity; next, the white fruit.

In

In 1782, Sig. Don Gio. Agemi di Giun, prelate of the Greek Catholic church, on Mount Libanus, exhibited to the academicians Georgofili of Florence, the 4th of December, some silk worms, in number thirty-eight, part of which had already made their cocoons, and part ready to make them, as accustomed to do in his own country, with the leaves of the wild mulberry. The seed was hatched in October; the worms fed with leaves, procured from warm gardens; cocoons were made in November; mallow leaves were used also*.

MODENA.

The export of silk from the city 46,000 lb. at 38 liv. (4d. each); from the whole territory, 60,000 *zecchini*.

PIEDMONT.—*Paveſe*.

Immediately on entering the dominions of the King of Sardinia, within two miles of St. Giovanne, mulberries are found regularly every where, and continue to Turin. Seven-eighths of them are about twenty or twenty-five years old; some however are amongst the largest I have seen.

LOMBARDY POPLARS.

They are very scarce throughout Lombardy; there is a scattering between Modena and Reggio; and Count Tocoli, five or six miles from Parma, planted several thousands along a canal, on the birth of his daughter, for her portion; but there is not, in any part of Lombardy, any law which in such cases secures the property of the trees thus planted, to the child they are intended for; it is merely private confidence.

CLOVER.

PIEDMONT.—*Cbentale*.

Such is the power of climate united with the advantages of irrigation, that clover is here mown for hay once after harvesting the corn it grew with; the hay is not of the best quality, but useful.

MILANESE.—*Milan to Pavia*.

On the rich dairy farms, the cows are fed much on clover. The red sort is sown, which wearing out, white clover comes so regularly, that the country people think the one sort degenerates into the other.

* *Corſo*, vol. iii. p. 123.

Vicenza.

They sow 12 lb. of seed per *campo* with wheat; it is cut twice the first year, yielding 1 *carro* each cut; the second year it is mown thrice: price 44 liv. the *carro*, which is 100 *pesi*, of 25 lb.

Padua.

Sow 12 lb. *grosso* per *campo* (14 lb. or 15 lb. per English acre) it gives three *carri*, each 1000 lb. at three cuts (1½ ton the acre English;) but they have crops that go much beyond this.

F I G S.

PIEDMONT.—*Nice to Coni.*

On this range of the Alps, there are, in favourable situations, a great quantity of fig trees; and the extreme cheapness of the fruit must be of no trivial importance in supporting the people, not only while ripe but dried.

H E M P A N D F L A X.

PIEDMONT.—*Cbentale.*

A *giornata* (to an acre as 7440 to 7929) produces 200 lb. for the proprietor, and as much for the farmer; and some crops rise to 650 lb. They gather the female hemp from the 25th of July to the 4th of August: the male the beginning of September. Of some pieces I was informed that a produce not uncommon was 30 *rubbii* of female, and 17 of male, worth 4½ liv. to 5 liv. the *rubbio*, both of the same price; and also 25 to 30 *mine* of seed, if well cultivated; but if not, 12 to 15. The *mine* 35 lb. and the price 4½ liv. to 5 liv. the *mine*. The common calculation is, that a *giornata* is worth 150 liv. to 200 liv. which may be called 10l. per English acre. Their contrivance for steeping is very simple and effectual: there are many square and oblong pits with posts in them, with open mortises for fixing poles to keep down the hemp, which is vastly preferable to our fods and stones.

Turin.

They sow 3 *mine* (45 lb. of wheat), and get 30 *rubbii*, at 4 liv. 10s. to 5 liv. the *rubbio* gross; but ready for spinning 12 liv. 10s. the finest; the second quality is 7 liv. 10s.; and the third 5 liv.; besides 3 *mine* of seed, at 2 liv. each. This product is above 8l. the English acre.

MILANESE.

MILANESE.—*Mozzata*.

Winter flax is here esteemed the properer for land that is not watered; they sow it the middle of September; they have had it in this country two years only, and call it *lino ravagno*. It gives a coarser thread than spring flax, but a greater quantity, and much more seed. The price of the oil 22*s.* the pound, of 28 oz.; of the flax, ready for spinning, 25*s.* or 26*s.*; of the thread, 4 liv. and 4½ liv. A *quartaro* of seed is necessary for a *pertica*, for which it returns eight times the quantity of seed, and 20 lb. of flax ready for spinning, at 25*s.* the pound.

Codogno.

When they break up their clover lands they sow flax on one ploughing, which is worth rent 20 liv. and crop 40 liv. per *pertica*, being 24 lb. of 28 oz. and seed three times more than sown. Much winter flax now green.

VENETIAN STATE.—*Bergamo*.

Winter flax green in October.

ECCLESIASTICAL STATE.—*Bologna*.

The territory of Bologna produces from 12 to 14,000,000 lb. of hemp. They manure for it highly with dung, feathers, the horns of animals, and silk worms refuse. The best hemp-land is always dug; the difference between digging and ploughing is found to be very great. If ploughed, three earths are given; when the spade is used, the land is first ploughed and then dug. For this crop five or six yards are left *unsown* under the rows of trees. The soil agrees so well with this plant, that the crop rises ten feet high; they gather it all at once, leaving only a few stands for seed. It is watered in stagnant pools. A good product is from 100 lb. to 200 lb. of 12 oz. per *tornatura*, of half an acre. The price of the best is from 20 liv. to 27 liv. the 100 lb. At present 25 liv. (the English pound one-fifth larger than the Bolognese, and the livre of the Pope's dominions is ten to the *zecchin*, of 9s. 6d.) ready for combing. When ready for spinning, the price of the best is 12*s.* the pound; and they pay for spinning such 6*s.* to 15*s.* the pound. Near the city, I viewed a field famous for yielding hemp: no trees are planted across it, which is so common in the country in general; a sure proof of the pernicious tendency of that system; since in very valuable fields these people themselves reject the method. Little or no hemp on the hills near Bologna, but some autumnal flax for family use.

M A I Z.

PIEDMONT.—*Cbentale*.

Maiz produces here 25 to 30 *mine*, which holds 47 lb. of wheat, and the price 2 liv. each. It is sown on three feet ridges.

Savigliano.

Maiz, in a good year, will yield three hundred fold, but in a dry one sometimes scarcely any thing.

Turin.

Made every where the fallow, which prepares for wheat.

Chivasco to Verceil.

A great deal of maiz through all this country, and all foul with grass and weeds, even to the height of two or three feet.

MILANESE.—*Milan*.

They sow much maiz, of the sort called *quarantino*, from its ripening in forty days (which however it does not). They sow it the middle of July, after wheat, which they cut the first week of that month. If the common maiz were sown at this time, they assert that it would yield no ripe seed: this is a very curious circumstance. The culture has been often recommended to England; if ever any thing were done, it must assuredly be with this sort; but even with this I should put no faith in the power of an English climate.

Mozzata.

They cultivate three sorts:—1. *Formentone maggengo*, sown the beginning of May, and reaped in October. 2. *Formentone agostano* o *formentone de ravettone*, because sown after taking off the rave or coleseed for oil, the end of May, and harvested the end of September. 3. *Formentone quarantino*, sown after wheat or rye, and cut the end of October.

Venice.

This plant was cultivated in the Polesine de Rovigo, towards 1560; and spread through Lombardy the beginning of the 17th century *.

* *Agost. Galla*. Notes, p. 534.

OLIVES.

STATE OF VENICE.

On the banks of the Lago di Guarda are the only olives I have seen since I left the country of Nice; but the number is not considerable, and most of them are dead, or nearly so, by the frost of last winter, which made such destruction likewise in France.

Tuscany.

Near Florence, at Martelli, the product of a farm of 190 *stiori* was as follows: in 1786, thirty *barrils*. In 1787, it was no more than three. In 1788, it yielded eight. In 1789, it was twenty-five; but on an average ten; for which produce there are two hundred trees. They are dunged every two or three years, and dug about once in three years. They are reckoned to lessen the product of corn one-fifth; this is a notion of the country, but I believe very far from accurate. The average price of oil is 5 *scudi* per *barril*, of 150 lb. (11. 8s. 4d.); ten *barrils* amount to 14l. 3s. 4d.; and as there are about thirty-four acres in 190 *stiori*, the product of oil is 8s. to 9s. per acre: a sum that yields no very favourable impression of the culture:—and, divided amongst two hundred trees, it does not amount to 1s. 6d. a tree.

The plain of Florence is all lined into rows of these trees, with vines between and upon them; in some places, an espalier of vines between the rows of olives; and when all are well cultivated, the olives yield the greatest produce, next the wine, and then the corn. I viewed, near Florence, some fields, in which I found twenty olives on a *stiora* of land, but this is not common: and on a very bad stoney soil, though in the plain, I found that it took twenty trees, of twenty-five years growth, to yield a *barril* of oil. But in a fine soil, and with very old trees, a *barril* a tree has been known. Vines are suffered here also to run up the trees, but they reckon it a bad custom. The price of oil is more than doubled in forty years. Very few olives were lost by the last hard frost, but great numbers by that of 1709. Landlord's half produce, of some fields I viewed—oil, 10 *pauls*; grain, 7; wine, 1; in all, 18 *pauls* per *stiora* (21. 5s. per English acre.)

This year, 1789, the Grand Duke, for the first time, has given a gold medal, of the value of 25 *zecchini*, for the greatest number of olives planted; no claimant to be admitted for less than five thousand: in consequence of this premium, above forty thousand trees have been planted. It will be continued annually.

There is, in the Maremma, some remarkable instances of the vast age to which olives will attain: Sig. Zucchini, professor of agriculture at Florence, informed me, that, upon examining the hills in the middle of that tract, he found in the midst of woods, and almost over-run with rubbish, olives of so immense an age and magnitude, that he conjectures them to have been planted by the ancient Hetruscans, before the Romans were in possession of the country; there must, of course, be much uncertainty in any conjectures of this kind; but a great antiquity of these trees is undoubted.

R I C E.

PIEDMONT.—*Ciglione to Verceil.*

They are now threshing rice with horses, as wheat in Languedoc;—thresh as much in the night as in the day:—meet also gleaners going home loaded with it. About five miles before Verceil, the rice-grounds are in great quantities: their culture, however, of this crop seems to want explanations. Here is, for instance, a great field, which was under rice last year, now left to weeds, with hogs feeding.—Why not sown with clover among or after the rice? They never plough but once for rice. The peasants are unhealthy from the culture; yet their pay not more than 24*s.* to 30*s.* a day. The soil of the rice-grounds here, is that of a fine loamy turnip sand; there is a mound raised around them, for the convenience of flooding at will.

Vercelli.

Rice is here reckoned the most profitable of all the cultivation of Piedmont; for it yields a greater value than wheat, and at a less expence. It demands only one ploughing, instead of several. Seed only 4 *mine*, at 1 liv. Watering, at 2 liv. 5*s.* Cutting, the end of July, 10*s.* The product is 60 *mine* rough, or 21 white; the latter at 4 liv. or 84 liv.; and 4 *mine* of a sort of bran, at 15*s.* or 3 liv.; in all 87 liv. (something under 5*l.* an acre). It is sown three years in succession; and the fourth a fallow; during which the land is dunged. The price of these lands, 500 liv. or 600 liv. the *giornata*. As rice can be sown only on land that admits watering at pleasure, I do not fully comprehend this account. Why, for instance, is not the land laid down for meadow, which evidently pays much better; and sells at a higher price? I suppose rice is ready money on demand, and meadows must be converted to cash circuitously. Good wheat land sells at 800 liv.

To Novara.

Passing the Sefia, which exhibits a bed of five times as much gravel as water, in three or four miles the quantity of rice is considerable: the stubble is green, and in wet mud; the sheaves thin. It extends on both sides the road for some distance; the whole inclosed by ditches, and rows of willow poplar pollards, as bad to the eye, as it can be to the health. One or two fields are not yet cut; it looks like a good crop of barley, being bearded. After Novara, see no more of it.

MILANESE.—*Milan to Pavia.*

The rice-grounds receive but one ploughing, which is given in the middle of March, and the seed sown at the end of the same month, in water to the seedsman's knees, which is left on the ground till the beginning of June, when the crop is weeded by hand, by women half naked, with their petticoats tucked to their waists wading in the water; and they make so droll a figure, that parties in pleasantry, at that season, view the rice-grounds. When the weeding is finished, the water is drawn off for eight days; and it is again drawn off when the ear begins to form, till formed; after which, it is let in again till the rice is nearly ripe, which is about the end of August, when it is reaped, or in the beginning of September; and by the end of that month, all is finished. Quantity of seed, the eighth of a *moggio* per *pertica*, produce 25 to 30 *moggio* rough, or $11\frac{1}{2}$ or 12 white. Price $37\frac{1}{2}$ liv. the *moggio*, (17l. 8s. per English acre), which produce is so large, that this minute I suspect the highest crop gained, and not an average one. The *moggio* of rice weighs 160 lb. of 28 ounces. The straw is of use only for littering cows; and the chaff, like that of all other grain, from a notion of its being unwholesome, is thrown on to the dunghill. They sow rice three years in succession, and then a course of something else. See *Courses of Crops*. The rice is rendered merchantable by being pounded in a mill by stampers, turned by a water-wheel.

In the great road there is a stone, at five miles from Milan, nearer than which it is prohibited to sow rice.

STATE OF VENICE.—*Verona.*

Of the produce of the rice-grounds in the Veronese, they reckon one-third for expences, one-third for water, and one-third profit.

PARMA.

Count Schaffienatti has sown rice, at Vicomero, eighteen years in succession, on the same land, without any rest or manure. Sow on 54 *biolcchi* 90 *staji*; and

and the produce 18 for 1. He digs the ground, as it is too marshy to plough it well; this costs 3000 liv. (each 2½d.) The straw sells at 80 liv. the load, of 80 *pesi*, of 25 lb. (¼ lb. English). Oxen also eat it. Rice is reckoned to yield four times over more nett profit than any other husbandry; more even than watered meadows.

V I N E S.

PIEDMONT.—*Antibes to Nice.*

A singular cultivation of this plant surrounding very small pieces from six to twenty perches, trained up willow trees; and the scraps of land within them cultivated. What a sun must shine in a country where thick inclosures are counted by perches and not by acres.

Cbentale to Racconis.

In rows at twelve to twenty feet, and appear like those of hops in Kent, supported on willow poles, twelve feet high, some of which take root, but are afterwards pulled up.

Chiavasco.

Vines fastened from mulberry to mulberry, but not running up these trees, only up willows, &c. that are between them.

MILANESE.—*Mozzata.*

Half this country is lined with vines, and it is reckoned that they will damage to the amount of one-tenth of the produce: each *pertica* of vines, in a common year, will give 50 lb. of grapes, worth 6 liv. the 100 lb. of 28 oz. hail allowed for; and of this half is the peasants share, for the expence of culture. At Leinate, I viewed some wine presses, which are enormous machines, the beam of one is forty-five feet long and four feet square; and at the end, where the screw is, a stone of vast weight, for which there is a paved hole in the pavement, that it may keep suspended; the cuves casks, and all the apparatus great: the quantity of vines 1000 *pertica*. The seeds of the pressed grapes are kept till dry, and then pressed for oil; the seed of the grapes that yielded 70 *brenta* of wine will give 10 lb. of oil: it is used for lamps. The poor people, who bring their grapes to be pressed, pay one-twelfth of the wine. Price at present, 6 liv. the *brenta*; but only 3 liv. for what is last pressed. The first flow is trod out by men's feet. Common price, 10 liv. or 12 liv. the *brenta*.

VENETIAN

VENETIAN STATE.—*Bergamo.*

From entering the Venetian territory, near Vaprio, the country is almost all planted in lines of vines, and the spaces between tilled for corn.

To Brescia.

This country, inclosed with hedges, besides which it is lined in stripes of vines, that are trained to low ash and maple trees, with mulberries at the end of every row; but the vines are not trained up these trees, though fastened to their trunks.

Vicenza.

The country, for 32 miles from Verona to Vicenza, except the watered parts, which are not a tenth of the whole, is lined into rows of pollards, each with three or four spreading branches, and at the foot of each two vines, many of them very old, with stems as thick as the calf of a man's leg; and many of the elms, maples, &c. are also old. They stand about a rod asunder, and the rows from twenty-five to thirty yards; and around the whole mulberries. Where the vintage is not finished, the vines hang in festoons from tree to tree, garnished with an astonishing quantity of bunches of grapes.

Vines, near Vicenza, produce 2 *maslatti*, each of 240 bottles, per *campo*; the price 16 liv. the *maslato*; the *campo* here is larger than at Verona, amounting to near an English acre; this is about 17s. an acre; a produce very easily lost, in the damage done to the corn.

Padua.

The same husbandry, of pollards and vines, continues hither. They reckon that vines pay better than mulberries; but in the districts of Verona and Vicenza mulberries are more advantageous than vines. This does not correspond with soil, for that of Padua is deeper and richer, for the most part, than the other, and therefore less adapted to vines. In conversation with Abbate Fortis, on the wine of the Paduan, &c. being so bad, he says, it is owing merely to bad management in making. They tread the grapes with their feet; put the juice in a great cuve; and will keep it fermenting there even so long as fifteen days, adding every day more and more, till the strength is exhausted, and the wine spoiled; no cleanliness, in any part of the operation, nor the least attention in the gathering, or in the choice of the grapes. He further added, that Sig. Modena, a Vicentino cultivator at Vancimuglio, adjoining the rice-grounds, and consequently as little adapted as possible to vineyards, provided the soil and
trees

trees were the cause of bad wines, makes that which is excellent, and which sell so high as 30 *l.* French per bottle: that Sig. Marzari, and Sig. il Conte di Porto, in the high Vicentino, with many others, as well as he himself, Abbate Fortis, has done the same with raisins from vines that run up the highest trees, such wine as sells from 20 *l.* to 35 *l.* French the bottle: and that some of these wines are so good, that the Venetian ambassadors, at different courts, use them instead of Madeira, &c.; and the wines of Friuli as those of Hungary, which they resemble; yet these vines are all on trees. He also observed, that it has been found, by experiment, that vines in these rich lands, trained near the ground, as in France, have yielded raisins and wine good for nothing; that the grapes even rot; that the land is too rich for the vines to have all the nourishment, unrivalled by the roots of the trees. It is very much to be questioned, if the experiments here alluded to, have been made with due attention: if the land is too rich for vines, plant them upon soils that are proper; and keep these low districts for grass and corn; but that vines, hidden from the sun amongst the branches of trees, can ripen properly to give a well-concocted juice, appears very dubious; and the fact of all the wine, commonly met with in this country, being bad, seems to confirm the reasoning.

ECCLESIASTICAL STATE.—*Bologna.*

All this country, where I have viewed it, is lined into rows of trees for vines, ten or twelve yards asunder, on the mountain, but more in the plain. But Sig. Bignami has his vineyards planted with *echalats* (poles), in the French way, about four or five feet square, and he finds that these always give better wine than the vines trained to trees; and the land by *tornatura* gives a great deal more wine; though each vine separately on trees, gives more than each in this method. The object, in this instance, was the goodness of wine; Sig. Bignami thinks the common method most profitable. The vines are now (November) trained and pruned, and turned down five or six feet and tied; if allowed to mount, they yield much fewer grapes. Vines on the mountains yield thrice the value of the wheat; and the double of all other productions, wheat included.

TUSCANY.—*Bologna to Florence.*

Vines in this route are planted differently from any I have yet seen. Some are in espaliers, drawn thinly across the fields; others are trained to small posts, through which, at top, are two or three sticks fixed to hold them up; others are in squares of five or six feet, and six or seven high, without such posts; but all in the arable fields are, generally speaking, in lines.

Florence.

Florence.

I here met with a case absolutely in point, to prove how mischievous trees are to corn, even in this hot climate.—A field under olives, which yielded in corn $6\frac{1}{2}$ for 1 sown, was grubbed, after which the common produce was 14 for 1. Now, as the olive is by no means one of the worst trees for corn, this shews the great loss that accrues from the practices I have noted throughout Lombardy. Yet, in common conversation here, as elsewhere, they tell you the injury is small, except from walnuts, which do more mischief than any other.

MODENA.

It appears to be a singular circumstance, that in the parts of this territory near the hills, corn pays better than wine; but in the plain, wine better than corn: I suspect that some mismanagement occasions this apparent contradiction. From Modena to Reggio the country is planted in rows, as in the Venetian State, &c. and the trees that support the vines being large, the whole has the appearance of a forest.

PARMA

From Reggio to Parma, the same system holds, but executed in an inferior manner. And from Parma to Vicomero, the trees that support the vines are pollards, with old heads, like many we have in England; contrary to the practice of the Venetian State, where they are kept young. To Firenzuolo, the vines are all buried in like manner; some here are planted for props, and the poles which serve as such are set in rows: in both methods the shoots are equally buried. A scattering of golden willow in the rows, I suppose for attaching the vines to the props. From Borgo St. Domino to Firenzuola, there is a decline both of vines and wood; the country is not as hitherto, regularly lined, and many large fields are without any; this is the more to be remarked, as here begin some inequalities of country, the gentle ramifications of the Appenines. To Castel Giovanne, most of the fields have no vines, only a scattering; shoots buried as before; but the inclosures have many pollards in the hedges, like the woodlands of Suffolk. From Piacenza, after passing the Trebbia, the rows of vines are thirty to forty yards asunder, with heaps of props, ten feet long, set like hop-poles; very few or no vines trained to trees.

PIEDMONT.—*Paveſe* *.

The country is all the way hill and dale; the flat of Lombardy finishing with the Dutchy of Piacenza. It is about half inclosed, and half with rows of

* The country ceded by Austria to Sardinia, part of the district of Pavia.

vines. There are also vineyards planted in a new method; a single row of vines, with a double row of poles, with others flat, so as to occupy four ridges, and then four to ten of corn. Some vine shoots buried for a few miles, but afterwards none. Near Stradella, the props appear like a wood of poles.

SAVOY.

The vineyards of Montmelian yield $1\frac{1}{2}$ *tonneau* per *journal*, which sell at $4\frac{1}{2}$ *louis* the *tonneau*: all, not in the hands of peasant proprietors, is at half produce.

SECT. IV.—OF IMPLEMENTS AND TILLAGE.

Coni.

The ploughs have a single handle, twelve or thirteen feet long, which throws the ploughman to such a distance behind, that his goad is fixed in a long light pole. The oxen are yoked in the same manner as ours; but the bow is of iron under the neck, and the pressure is received by two bits of wood. Some ploughs drawn by a yoke, others by two yokes of oxen.

Cbentale.

The names which are given to the parts of a plough here are,—long handle, of fourteen feet, *siva*; beam, *bura*; head, *cannonia*; coulter rivetted to the share, *cultor*; share, *massa*; ground-rest, on which the share sheathes, seven feet long, *dentale*; earth-board, five feet long, *oralia*.

The Count de Bonaventura, in explaining to me their tillage, shewed the criterion, as old as Columella, of good ploughing, by thrusting his cane across the ridges, to see if rest-baulked. They plough mostly on the three feet ridge, forming and reversing at one bout; *i. e.* two furrows; the work strait. Use no reins, and have no driver, though the ploughman is above twenty feet from the oxen. Two small beasts cut a good furrow on the top of the old ridge, seven inches deep; and these ploughs, long as they are in the ground, certainly do not draw heavily.

The oxen, whether at plough or in the waggons, do not draw, as I conceived at first sight, by the shoulder, but in a method I never saw before, nor read of; they draw by pressing the point of the withers against the yoke, and not at all by the bows; and in examining them, the master and man contended that the strength of an ox lies there, and not in his shoulders, nor in his head,

or

or roots of the horns. It appears a strange practice; but it is yet stranger, that yoke a beast how you will, he does his work, and apparently without distress.

Chentale to Racconis.

They have here a most singular custom, which is that of shovelling all the moveable soil of a field, into heaps of a large load, earth, stubble, and weeds; they say, *per ingrassare la terra*.

To Turin.

The lands sown with wheat on three feet ridges, is worked fine with a machine of wood, at the end of a handle, formed nearly like a hoe. Wherever one sees these operose niceties, we may conclude the farms are very small.

Turin.

Plough with a pair of oxen, no reins, no driver; go to work at five in the morning, and hold it till night, except $1\frac{1}{2}$ hour at dinner; that is twelve hours work, and do a *giornata* a day, something under an acre, one bout to a three feet ridge, reversing.

Vercelli.

Price of a ploughing, $3\frac{1}{2}$ liv. per *giornata*, this is about 3s. 4d. per English acre.

MILANESE.—*Milan to Pavia.*

Hire of a ploughman and pair of oxen, 4 liv. a day; but if no food for the oxen, 6 liv. The ploughs here vary from those of Piedmont. The handles are not above half as long, and are called *stiva*; the beam, *burette*; the coulter, *coltura*; the share, *massa*; the earth-board, *orechio*; the land-board, *orechini*. There is a most gross and absurd error in all the ploughs I saw, which is the position of the coulter, 18 or 20 degrees too much *to the land*; every one who is acquainted with the right structure of a plough, know that it should just clear the share; this great variation from the right line, must add greatly to the draft; and, in difficult land, fatigue the cattle.

Mozzata.

A light poor plough, the share with a double fin, but so narrow as to cut only four inches of the furrow; the heel of the plough is nine or ten inches wide; the work it performs is mere scratching; and the land they were sowing

with wheat, a bed of *triticum repens* and *agrostis stolonifera*. They have here a great opinion of digging; and a proverb, which says, *La vanga ha la punta doro*—The spade has the point of gold.

Codogno.

Here, as near Milan, the coulter is many degrees out of the line of the share; and the shares not more than four inches wide. Shocking!

Codogno to Crema.

The harrows in this country have handles to them of wood; I am amazed this practice is not universal; yet I never saw it before, except on my own farm.

VENETIAN STATE.—*Bergamo.*

In passing from Vaprio to this place, they are ploughing with a pair of oxen a-breast, and two horses before them in a line; wheel-ploughs; share five inches wide, and with a double fin. Near the town of Bergamo, I saw them ploughing a maize stubble for wheat, as full of grass almost as a meadow: a lad drives, and another stout one attends to clear the coulter from grass, &c.; the plough low on the carriage, with wheels; the breast all iron, and not ill formed; the fin of the share double, and about eight inches wide; the coulter nearly in the same direction as the share, but clearing four inches to the land side; two short handles. The furrow full nine inches deep; but crooked, irregular, and bad work. Notwithstanding this depth, they are great friends to the spade. From four to six for one, are common crops with the plough, but twelve to fourteen for one, are gained by the spade. There must be an inaccuracy in this; the difference cannot be owing merely to digging. We may be certain, that the husbandry, in other respects, must be much better.

Vicenza.

They here plough with four oxen in harness; many of them are of an iron-grey colour, with upright thick ugly horns. Some, however, are fine large beasts. Their plough is a strange tool; it is two feet four inches of Vicenza wide, (their foot is above $1\frac{1}{2}$ English): the share has a double fin, of a foot wide; consequently cuts half a foot in the furrow of more than two: has wheels, but no coulter. The land-board is called *fondelo*; the share, *vomero*; the earth-board, or breast, *arsedeman*; two short handles, the left *sinistrale*; the right *brancole*; the beam, *pertica*.

ECCLESIASTICAL STATE.—*Bologna.*

The coulter of the ploughs here stand 16 degrees from the right line; an incredible blunder, had I not before met with it in the Milanese. The beam, *pertica*; the handles, *stiva*; the mould-board. *assa*; the share, *gomiera*; the ground-rest, *nervo del focco*; the coulter, *coutre*.

TUSCANY.—*Florence.*

Here the beam is called *stanga*, and *bura*; the single handle, *stagola*; the body of the plough, *chicapo di aratro*; the share, *vangheggiola*. The body is hewn out of one large piece of wood; the fin double, and seven or eight inches wide.—I see no ploughing but on three feet ridge-work; reversing. They are now sowing wheat among tares, about six inches high, and plough both in together at one furrow, splitting the ridges with a double-breast plough. Oxen are used, that draw by the nape of the neck; then women, with a kind of half pick, called *marona*, work the ridge fine. No dressing of the seed against smut, &c.

PARMA.

The plough here has wheels; a single-breast, that turns to the right, and pretty well; a double finned share; and the coulter standing three inches to the left of the right line; drawn by two oxen, and two cows, with a driver.

SAVOY.

The oxen in the vale of Chamberry, draw not only by the horns, the yokes bound to them in the common way by leathers, but they have a double bar, one against the shoulders, as if the beast might be able to draw by both at pleasure.

MANURES.

Nice.

There is here a greater attention paid to saving and using night soil, than even in Flanders itself. There is not a necessary in the town which is not made an object of revenue; and reserved or granted by lease. In all the passages between the walls of gardens, in the environs, are necessaries, made for passengers. The contents are carried away regularly in barrels, on asses and mules; and being mixed with water, is given regularly to the vegetables of the gardens. The last winter having damaged many orange trees, they pruned off the damaged branches;

branches; and, to encourage them to shoot again strongly, the roots are dug around, and at the foot of each tree, a good mess of this invigorating manure is buried.

MILANESE.—*Milan.*

Night soil is greatly valued; it is bought at a good price, and spread on sowing wheat.

STATE OF VENICE.—*Vicenza.*

Sig. Giacomello has tried gypsum with success, broken small and calcined in an oven; also in a lime kiln; pulverises it finely, and sifts it. He remarks, that this is the chief use of calcination. Uses it for clover, lucern, and meadows; sows it as a top dressing on those plants, just as they rise; never buries it; mixes with sand, in order to spread equally; best to sow it when the land is dry; never when the plants are high and wet: quantity, 140 lb. *grosso*, upon 1250 *tavoli* of Treviso. If the land is bad, 300 lb.; and on middling, 200 lb. The effect on perennial clover, upon good land, is such, that any greater crops would rot on the ground. The same quantity of meadow that gives, without gypsum, a *carro* of hay, will, with that manure, spread about the 11th of November, produce 2 *carri* the year following; 3 *carri* the year after that; and on some meadows even to 4 *carri*. On old poor meadows, full of hard and bad grasses, this manure does not take effect so soon, and require a larger quantity of gypsum. (*Modi di aumentare i Bestiami*, 1777, p. 9.)

Sig. Pieropan informed me, that this manure has been used here for eight years, with much success, especially on all dry lands, but is good for nothing on wet ones; it is supposed to act by attracting moisture; 400 lb. of 12 oz. are spread on a *campo*; best for clover, wheat, or natural grass. It is said to force land so much, that it demands more dung, than if no gypsum had been spread.

Parma to Piacenza.

The dunghills in this country are neatly squared heaps.

CHAP. IV.

Of the Encouragement and Depression of Agriculture.

IN every country, through which an inquisitive man may travel, there can be no object of his inquiries more important than these—How far is government, and all the circumstances any way dependent on government, favourable or unfavourable to the culture of the earth? In truth, this question involves the whole circle of the political science. In so immense a range, it is in the power of an individual to give but a few sketches; which may afterwards, by some masterly hands, be melted into one harmonious piece. All the writings on political œconomy, which I have hitherto read, are filled too much with reasonings; yet experiment ought to be the only foundation. The facts which I have collected under this head, may be thus arranged:—1. Government.—2. Taxation.—3. Tythe.—4. Commerce.—5. Population.—6. Prohibitions.—7. Prices of commodities.

SECT. I.—OF GOVERNMENT.

It is a vulgar error, of no inconsiderable magnitude, to imagine, as many writers have done, that all arbitrary governments are the same. Whoever travels into countries under various forms of dominion, will find, from innumerable circumstances, that strong distinctions are to be made. The mildness of that of France can never be mistaken, which was so tempered by what *was* the manners of the people, as to be free in comparison with some others. Among the Italian states the difference will be found to be considerable.

The dominion of the House of Austria has been, by some, considered as hard, harsh, and unfeeling; till the admirable Leopold retrieved, by the wisdom and humanity of his government, in Tuscany, the character of his House. By the constitution of Milan, no new tax could be assessed or levied without the consent of the States; but Mary Theresa, about the year 1755, abolished the States themselves, which never were restored till Leopold came to the throne. It may easily be conceived, that such a system of despotism, was followed by measures that partook of its spirit; the general farms, by which I mean the farming of the taxes, which had from the begin-
ning

ning of the present century been grievous to the people, became doubly so about the year 1753, when new ones were established. The administration of these farms was cruel, or rather infamous; and the ruin brought on numbers, for the smallest infraction of the regulations, spread a horror against the government through every corner of the Milanese, and tended strongly to occasion a declension in every source of national prosperity. The abolition of these farms, was the work of the Emperor Joseph; who heard such a reiteration of complaints against the farmers, whose great wealth * rendered them doubly odious, that he made such representations to his mother, as were effectual, and they were abolished about eighteen years ago. The present Emperor no sooner came to the throne, than he re-established that constitution, of which his mother had deprived the Milanese; the States and the Senate were restored; and also, the right of the States to appoint, what is called an orator to Vienna; in fact, an ambassador paid by themselves, to lay their representations before the court, without the intervention of a governor; a right which cannot be deemed unimportant. So that at present, the government of Milan, though by no means, such as can meet our ideas of freedom, is yet a kind of limited monarchy; for assuredly, that government which does not possess the power of taxation, must be esteemed such.

Count Firmian, while prime minister for the Milanese, was the author of a law, which, if it could be adopted in England, would be worth an hundred millions to us. It obliges all communities, &c. that possess waste or uncultivated lands, to sell them to any one that offers a price, in order to cultivate them; but they have the necessary liberty of publishing the price offered, and receiving proposals of a better; a fair auction takes place, and the lands become cultivated. Such possessors of wastes, are even obliged to let them at an annual rent *for ever*, by the same process, if any offer of rent is made to them, be it as low as possible. And the effect of this excellent law, has been the cultivation of many wastes, but not all; for, on returning from Mozzata to Milan, I passed a very extensive one, highly capable of profitable cultivation.

VENICE.

The celebrated government of this republic, is certainly the most respectable that exists in the world, in point of *duration*; since it has lasted without any material change, and without its capital being attacked for 1300 years,

* One of them now living, Count de Crepy (what a plague have such fellows to do with titles, unless to be written on the gallows on which they are hanged?) has between 20 and 30,000 *zecchini* a year in land. He was originally a poor boy, that sold cloth on a mule at Bergamo: one of his commis made 100,000 *zecchini*.

while

while all the rest of Europe, and of Asia, has been subject to innumerable revolutions, and the bloodiest wars and massacres, even in the very seat of empire. That duration is one of the first objects of a government, can never admit a doubt; since all other merit, however it may approach human perfection, is nothing without this. A well organized aristocracy, in which the greatest mass of the wisdom of the community, shall be found in a senate, seems, from the vast and important experiment of this celebrated republic, to be essentially necessary to secure the duration of any government. But the duration of an evil, becomes a mischief instead of an advantage; and that tyranny, which is so politically organized, as to promise an immense duration, is but the more justly to be abominated. The knowledge which will result from long experience, may probably teach mankind the right composition of a mingled form, in which the aristocratic portion will give duration and firmness; the democracy, freedom; and the conformation of executive power, energy and execution. Perhaps, the British government approaches the nearest to such a description.

The reputation of the Venetian government, is now its only support, a reputation which it does not at present merit in the smallest degree:—but as this idea is directly contrary to the accounts given by many travellers, I feel it necessary to premise, that I should think it merely trifling with the reader, to travel to Venice, in order to write dissertations in my own name, on the government of that republic; I do no more than hold the pen to report the opinions of Italians, on whose judgment I have every reason to rely; and, as exaggerated panegyrics have been published of the government of this State, it is fair to hear what may be urged on the other side of the question.

For twenty years past, there has been, in the republic, little more than a multiplication of abuses, so that almost every circumstance, which has been condemned in the arbitrary governments of Europe, is now to be found in that of Venice. And as an instance of the principles on which they govern their provinces, that of Istria was quoted. 1. To preserve the woods (which belong to the Prince), they prevent the people from turning any cattle into them; and if any man cut a tree, he is infallibly sent to the gallies, which has driven numbers out of that part of the country, where the woods are situated. 2. There are great opportunities of making salt, and the pans might be numerous, but it is a monopoly held by the State; they purchase a certain quantity, at 10*l*. French, per quintal, and if more than the specified quantity be made, it is lodged in their magazines on credit; and it may be two, three, or four years before the maker of it be paid. 3. Oil is a monopoly of the city of Venice; none can be sold but through that city; by which transit, an opportunity is taken to levy two ducats (each 4*liv*. of France) per barrel, of 100*lb*. and

five more *entrée* into Venice. 4. The coast abounds remarkably with fish, which are taken in almost any quantity; salt is on the spot, yet no use can be made of it, but by contraband, except for Venice singly. Thus a great trade in barrelled fish is foregone, in order to make a whole province beasts of burthen to a single city. 5. The heavy tax of a *stajo* of wheat, 130 lb. is laid on each head of a family, payable to the Venetian bailiff.

The practical result of such principles of government, confirms whatever condemnation theory could pronounce. Every part of the province, except a district that is more favoured than the rest in soil and climate, is depopulated; and so much are the woods preferred to the people, that parts, which once abounded with men, are become deserts; and the small population remaining in other parts, is every day diminishing. Dalmatia is in a yet worse state; for the greater part is a real desert:—in 1781 and 1782, no less than 12,000 families emigrated from the province. As I have not travelled in these provinces, I do no more than report the account given by well-informed Italians, though not residing in the territories of the republic. Before the government of this stern aristocracy is made the subject of exaggerated praise, let facts counter to these, be made the foundation.—But farther,

In the immediate operations of their government *at home*, the same weakness is found. Their poverty has increased with their revenue; they have raised the leases of the farmers general (for that odious collection is the mode they pursue) considerably: and near twenty years ago, they seized many of the possessions of the monks—that act for which the National Assembly of France has been condemned; but which, in the hands of numerous other governments, has either passed without animadversion, or has been commended. They did the same with the estates of some of the hospitals; but though such exertions have raised their revenue to 6,100,000 ducats, (1,054,000 l.) yet they have found their affairs in such a situation, from bad management, that they have been obliged to sell the offices, which were in better times granted to merit; and committed a sort of bankruptcy, by reducing the interest of their old debts, from 5 to 3 per cent. Their credit is at so low an ebb, that, no longer ago than last June, they opened a subscription to fund 700,000 ducats; and, notwithstanding every art, could procure no more than about 300,000. Instead of their famous chain, which marked the wisdom of their œconomy, their treasury is without a sol: and, to shew the apprehensions they have of provinces under their dominion throwing off their yoke, if they are at a small distance from the seat of government, the State makes a distinction in the political treatment of the Bergamasque and Brescian territories, from those nearer to Venice, in respect to privileges, punishments, taxes, &c.

No favourable feature of their government; and which shews that they think the people made for their city.

Perhaps, in the system of their finances, there is no circumstance that shews a decline of the real principles of their government, more than that of putting contraventions of the tobacco farm under the controul of the State inquisitors; which must have been done since M. de la Lande's second edition, as he mentions expressly their having nothing to do with the finances*. A conduct utterly ridiculous, in a State that once conducted itself with so much dignity.

Even in the delicate article of imparting the privileges of the aristocracy, to the nobility of Terra Firma, by whom they are in general detested, they have exhibited no doubtful symptoms of weakness, and want of policy. Reputation has been for many years the great support of their government; to manifest therefore such a want of policy, as strikes the most careless eye, is to suffer in the tenderest point. In 1774, they offered, gratis, a seat in the *consiglio maggiore*, to forty families, their subjects, who possessed 1200l. a year in land; provided there were four degrees of nobility, on the side of both husband and wife. Great numbers of families were eligible, but not ten in the whole would agree to the proposal. To offer a share in the legislature of so celebrated a republic, which in past periods would have been sought for with singular avidity, and to suffer the mortification of a refusal, was exhibiting a sign of internal weakness, and of want of judgment, adapted to reduce the reputation of their policy to nothing. The motives for the refusal are obvious: these families must of course remove to Venice; that is, to go from a city where they were old and respected, to another where they would be new and despised. Their estates also would not only suffer from their absence, but would be subject to new entails, and held by other tenures; no mortgage of them is allowable; and they are subject to peculiar laws of inheritance. In addition to these disadvantages, they are cut off from serving foreign princes; whereas the nobility of Terra Firma engage in such services. The Emperor's ambassador at Turin, is a subject of Venice; and one of the Pellegrini family, a field marshal in his army. Nor did the noblemen of Terra Firma refuse the favour, for these reasons alone; they dreaded the power which the State exerts over the noble Venetians, in sending them upon expensive embassies, in which they must spend the whole of their income, and, if that be not sufficient, contract debts to support themselves; for these reasons, and many others mentioned to me, which I did not equally understand, the government might have known before they made the offer, that it would subject them to the disgrace of a refusal. Long before the period in question, considerable additions had been

* *Voyage en Italie*, tom. vii. p. 7.

made to nobles of Venice, from the Terra Firma, but these honours were paid for; the price 17,000*l.* sterling; 7,000*l.* in cash, and 10,000*l.* lent to the State in perpetuity.

It is a curious circumstance, which marks undeceivingly the general features of the Venetian government, that about forty years ago, as well as at other periods, there were negotiations between the Court of Vienna and the Venetians, relative to an exchange of territory; the district of Crema was to have been given by Venice, for a part of the Ghiara d'Adda; the rumour of which, filled the people of the latter with the greatest apprehensions; they felt even a terror, at the idea of being transferred to the government of Venice; knowing, certainly, from their vicinity, that the change would be for the worse. This ascertains the comparative merit of two governments, that one is less bad than the other.

Upon the whole it may be remarked, that the wisdom of the Venetian government flows entirely from its interior organization, which is admirably framed; but abuses, in spite of this, have multiplied so much, that the first real shock that happens will overturn it. The fall of a government, however, which has subsisted with great reputation so much longer than any other existing at present, ought to be esteemed a great political loss, since the establishment of new systems is not at present wanted for the benefit of mankind, so much as the improvement of old ones; and if by any amelioration of the Venetian aristocracy, the benefit of the common people could be better secured, it might yet last in enlightened ages, as well as through those of darkness and ignorance.

B O L O G N A.

The government of the church, though in so many respects considered as one of the worst in Europe, ought not to be condemned too generally, for some discrimination should be used. Thus, in point of taxation, there are few countries that have less to complain of than this, as I have shewn in the proper place; and another circumstance was mentioned to me here, which proves that it is not the Pope's fault that it is not better—his Holiness was ready to abolish all fêtes, confining them to Sunday; and made the offer to the Senate of Bologna, if they would apply to him for the purpose; great debates ensued in that body, and it was determined not to make the application.

T U S C A N Y.

The government of the Grand Duke is, as every one knows, absolute; it admits therefore of no other discrimination, than what results from the personal character

character of the Prince. The circumstances I noted, during my residence at Florence, will shew that few sovereigns have deserved better of their subjects than Leopold: the details, however, which I shall enter into, will be very slight, not that the subject wants importance, but because many other books contain large accounts of this period; and especially the collection of his* laws, of which I wish to see a complete English translation, for the use of our legislators. The encouragements which this wise and benevolent sovereign has given to his subjects, are of various descriptions; to class them with any degree of regularity, would be to abridge that collection; a few, that bear more or less upon agriculture, I shall mention.

I. He has abolished tythes, which will be explained more at large, under the proper head.

II. He has established an absolute freedom in the trade of corn.

III. He has for many years contributed one-fourth part of the expence of buildings, in the Val de Nievole, and the lower province of Siena.

IV. He has this year made the culture of tobacco free, and engaged to buy all that is raised at 16/. the pound.

V. He has extinguished the national debt of Tuscany, which had existed from the time of the republic; for it deserves noting (in order for some future historian of the † modern ages, to mark the fact that the richest people run in debt the most) that the republic of Florence was one of the most commercial and rich in Europe. Two evils attended this debt, which the Grand Duke bent his operations to remove; *first*, three or four millions of it were due to foreigners, particularly to the Genoese, which carried much money out of Tuscany; and, *secondly*, there were distinct bureaus of collection and payment, for transacting the business of these debts. To remedy this double mischief, he first bought up all that part of the debt due to strangers, which he effected by the operation of a steady and wise œconomy; he then called on the Tuscan creditors to liquidate their debts, in the ratio of 3 per cent.; those who had money did it; and to those who had none, he lent the necessary sums: by this method, the distinct receipt and payment were abolished; the accounts were melted into the land-tax; and a number of reve-

* *Collezione di Leggi*, 8vo. 10 vols.—Siena.

† There is no work in the whole range of literature, more wanted than a Modern History of Europe, written philosophically; that is to say, with due attention to the progress of arts, sciences, and government; and with none paid to wars, battles, sieges, intrigues, generals, heroes, and cut-throats, more than briefly to condemn them: in such a work, the circumstance of the richest countries in Europe, having plunged themselves the deepest and most ruinously in debts, to support wars of commerce and ambition, should be particularly explained and condemned.

nue officers, &c. were reformed: nine or ten millions of crowns were thus extinguished.

VI. He has abolished all rights of commonage throughout his dominions, and given the powers of an universal inclosure.

VII. He has sold a considerable portion of the estates belonging to the sovereign, which has occasioned a great increase of cultivation, and the settlement in his dominions of many rich foreigners*.

VIII. In levying taxes, he has abolished all the distinctions of noble, ignoble, and ecclesiastical tenures; and all exemptions are set aside.

IX. He has built a magnificent lazaretto at Leghorn, and spent three millions on roads; but it would be entering too much into detail to specify his works of this sort; they are numerous.

The effects of such an enlightened system of government have been great; general assertions will not describe them so satisfactorily to a reader as particular instances. Sig. Paoletti, who has been *curé* of the parish of Villamagna forty-three years, assured me, that the forty farms, of which it consists, have risen in their value full 2000 *scudi* each in that time, which is about *cent. per cent.* of their former value; this great improvement has been chiefly wrought of late years, and especially in the last ten. It highly merits notice, that the countries in Europe, whose whole attention has been given exclusively to their commerce and manufactures, and particularly England, where the commercial system has been more relied on than in any other country, have experienced nothing equal to this case of Tuscany, the government of which has proceeded on a principle directly contrary, and given its encouragement *immediately* to agriculture, and *circuitously* to manufactures. In the tours I made through England, twenty years ago, I found land selling on an average at 32½ years purchase; it sells at present at no more than 28. While Tuscany therefore has been adding immensely to the money value of her soil, without trade and without manufactures (comparatively speaking to those of England), we have in the same period, with an immense increase of trade, been losing in our land. This fact, which is unquestionably true, is a curious circumstance for political analysis: it proves something wrong in our system. Population in Villamagna has augmented about a seventh, in the same period.

I shall not quit this article, without giving the preference decidedly to Leopold, Grand Duke of Tuscany, as the wisest of the princes, whose power admits a comparison in the age in which he lives: those are mean spirits, or

* By the general regulations for the district of Florence, of May 23, 1774, cap. 35. it is ordered, that all the landed property of the communities, kept in administration, or let, shall be sold or let on long lease. *Paoletti*, p. 85.

something worse, that will hesitate a moment between him and Frederic of Prussia: a sovereign no more to be compared to him, than the destroyers and tyrants of mankind are to be placed in competition with their greatest benefactors*.

MODENA.

In an age in which the sovereigns of Europe are incumbered, and some of them ruined by debts, a contrary conduct deserves considerable attention. The Duke of Modena; for ten years past, has practised a very wise œconomy: he is supposed, on good authority, to have saved about a million of *zecchins*, (475,000*l.*) and he continues to save in the same proportion. This is a very singular circumstance, and the effect of it is observable; for I was assured at Modena, that this treasure was much greater than the whole circulating currency of the Dutchy; and they spoke of it as a very mischievous thing, to withdraw from circulation and *use*, so considerable a sum, occasioning prices generally to rise, and every thing to be dear. By repeated inquiries, I found this dearth was nothing more than what is found in the States around, which have all experienced, more or less, a considerable rise of prices in ten years. But how could withdrawing money from circulation raise prices? It ought, on the contrary, in a country that has no paper-money, to lower them. That this effect did not follow, we may easily conclude, from these complaints. But the very persons who complained of this treasure could not assert, that money was more wanted in the Dutchy than before it was begun to be saved. They even gave a proof to the contrary, by affirming the rate of interest to be at present $4\frac{1}{2}$ per cent. only. Upon the whole, the effect is evidently harmless; and it is a most curious fact in politics, that a government can gradually draw from circulation a sum that in ten years exceeded the current coin of the State, without causing an apparent deficiency in the currency, or any inconveniency whatever. Conclusions of infinite importance are to be drawn from such a fact; it seems to prove, that the general modern policy of contracting public debts, is absurd and ruinous in the extreme; as saving in the time of peace, is clearly without any of those inconveniences, which were once supposed to attend it; and by means of forming a treasure, a nation doubles her nominal wealth, that sort of wealth, which is real or imaginary, according to the use that is made of it. The reputation, preventing attacks, is perhaps the greatest of all. How

* The conduct of this Prince in his new situation, to which he acceded at a most critical and dangerous moment, has been worthy of his preceding reputation, and has set a stamp on the rank in which I have supposed him. A few years more added to the life of Joseph, would have shivered the Austrian monarchy to nothing; Leopold has, by his wife and prudent management, every where preserved it.

contrary to the funding system, which carries in its nature, such a probability of present weakness, and such a certainty of future ruin!

PARMA.

The river from Parma to the Po has been surveyed, and might be made navigable for about 25,000*l.* sterling; but to the honour of the government which has been diffused through so many countries by the House of Bourbon, no such undertaking can here be thought of. Don Philip's history, it is to be hoped, will be written by some pen that can teach mankind, from such an instance, of what stuff men are sometimes made, whom birth elevates to power. The present Duke spends too much money upon monks, to have any to spare for navigations.

PIEDMONT.

The House of Savoy has, for some centuries, possessed the reputation of governing their dominions with singular ability; and of making so dextrous a use of events, as to have been continually aggrandizing their territory. The late King was among the wisest princes of his family, and shewed his talents for government in the practice of an enlightened and steady œconomy: it deserves no slight attention among the princes of Europe, in the present ferment of men's minds, whether there be any other criterion of a wise government. The late King of Sardinia saved 12,000,000 *liv.*; paid off a great debt; repaired all his fortresses; adorned his palaces; and built one of the most splendid theatres in Europe; all by the force of œconomy. The contrast of the present reign is striking; his present Majesty found himself in possession of the treasure of his predecessor. He sold the property of the jesuits, to the amount of 20,000,000 *liv.*; he has raised 7 or 8,000,000 *liv.* by the creation of paper-money; thus, without noticing the portions of the Queen and the Princess of Piedmont, he has received 40,000,000 *liv.* extraordinary (2,000,000*l.* sterling): all of which has been lavished, and a debt contracted and increasing; the fortifications not in good repair; and report says, that his army is neither well paid, nor well disciplined. These features are not to be mistaken; the King, though free from the vices which degrade so many princes, and possessing many amiable virtues, is of too easy a disposition, which exposes him to situations, in which œconomy is sacrificed to feelings—amiable for private life, but inconsistent with the severity of a monarch's duty.

It is a most curious circumstance in the King of Sardinia's government, that there is in this court, a great desire to sell the island of Sardinia. A treaty was opened with the Empress of Russia for that purpose, after she was disappointed in

in her negotiation with the Genoese, in the projected acquisition of Spazzie, and of Malta : but in all these schemes of a Mediterranean establishment, she was disappointed by the vigorous and decisive interference of the courts of Versailles and Madrid. One cannot have any hesitation in the opinion, that to improve this island, by means of a good government, would be more political than so strange a measure as its sale*.

I shall

* It may not here be useless to the reader, if I note some minutes taken at Turin, concerning that island, one of the most neglected spots in Europe ; and which, of course, betrays the effects of a vicious system of government sufficiently, for conclusions of some importance to be drawn. The marshes are so numerous and extensive, that the *intemperia* is every where found; the mountains numerous and high; and wastes found so generally, that the whole isle may be considered as such, with spots only cultivated. Estates in the hands of absentees are large, the rents consequently sent away, and the people left to the mercy of rapacious managers. The Duke of Affinaria has 300,000 liv. a year: the Duke of St. Piera 160,000 liv.: the Marquis of Pascha as much; and many live in Spain. M. de Girah, a grandee, has an estate of two days journey, from Poula to Oleastre. The peasants in a miserable situation; their cabins wretched hovels, without either windows or chimnies; their cattle have nothing to eat in winter, but browsing in woods, for there are no wolves. The number of wild ducks incredible. Shooting them was the chief amusement of an officer, who was nine years in the island, and who gave me this account. Provisions cheap; bread, 1*s.* the pound; beef, 2*s.*; mutton, 2½*s.*; a load of wood, of 10 quintals, 4*s.* 9*d.* sterling. Wheat is the only export; in this grain the lands are naturally fertile, yielding commonly seven or eight for one, and some even forty. No silk; and oil, worse than easy to conceive. They have some wine almost as good as Malaga, and not unlike it. The great want of the island, is that of water: springs are scarce, and the few rivers are in low bottoms. To these particulars, I shall add a few from Gemelli.

Sardinia is a real desert, for the most part; and where cultivated, it is in the most wretched manner: every thing consumed in the island (except the immediate food of the day), is imported, even their flax* and wood, from Corsica and Tuscany; the miserable inhabitants know not even the art of making hay; their crops are destroyed by wild animals, for the very notion of an inclosure is unknown. Leases are annual†. The tunny fishery produces from abroad, 60,000 *scudi*‡.

They have no mules; and the cities, as they are called, have been supplied with corn from abroad; with plenty in the island, which could not be brought, for want of mules to convey it; insomuch, that a fourth part of the corn has been offered as a payment, for carrying the other three parts to the towns, and not accepted||.

In 1750, there were about 360,000 souls in Sardinia; in 1773, they were 421,597; so that in twenty-three years, the increase was 61,597; occasioned by an institution called *Monti Frumentarii*, which furnishes seed on credit to the poor farmers, who cannot afford to buy it§. Cattle in the island, in 1771; cows, &c. 1,710,259; oxen for work, horses, mares, and calves bred for work, 185,266**.

* *Riformimento Della Sardegna Gemelli*, 4to, vol. i. p. 50.

† *Ib.* p. 24.

‡ *Ib.* p. 54.

|| *Ib.* p. 5.

§ *Ib.* p. 46.

** *Ib.* p. 350.

I shall not quit the subject of Italian governments, without remarking, that such deserts as Sardinia, under a despotic monarch, and Istria under a despotic aristocracy, are to be classed among political lessons. The tendency and result of such cases, are sufficient to shew the principles of government: the leaders should speedily correct the neglect of such systems. When people are well governed, THINGS CANNOT BE THUS. The wisdom applicable to the present moment, is to watch the colour and spirit of the age; to compound; and to yield, where yielding is rational.

Working oxen,	-	-	-	-	97,753
Cows in calf,	-	-	-	-	13,099
Calves, <i>ammanfite</i> ,	-	-	-	-	8,080
Horses and mares,	-	-	-	-	66,334
Hogs,	-	-	-	-	152,471
Oxen and calves, <i>rudi</i> ,	-	-	-	-	58,770
Cows and cow-calves, <i>rudi</i> ,	-	-	-	-	166,468
Goats,	-	-	-	-	378,201
He-goats,	-	-	-	-	42,597
Sheep,	-	-	-	-	768,250
Rams and wethers *,	-	-	-	-	143,502
					<hr/>
					1,895,525

The miserable state of this island, will best appear from calculating the number of acres. Templeman tells us, that it contains 6,600 square miles. England he makes 49,450; the real contents of which, in acres, are 46,915,933; Sardinia, in the same ratio, contains 6,261,782: the number of goats and sheep in the island, is 1,332,550; there is, therefore, about one sheep or goat to every five acres. Without viewing the island, I will venture to pronounce, that it would, without cultivation, support a sheep per acre; above six millions; and reckoning the fleeces at 3s. 4d. each, the wool only would produce one million sterling a year. It is said, the King of Sardinia offered to sell the island, to the Empress of Russia, for a million sterling. The purchaser of it would have a noble estate at twice that price, seeing the immense improvements of which it is capable. The fee simple of most of the estates are to be purchased at a very easy rate, as well as the sovereignty. The climate would admit of wool, as fine as the Spanish; if it were made into an immense sheep-walk, with culture only proportioned to their winter support, it would yield an exportable produce of full two millions sterling annually.

Gemelli mentions the island being capable of producing as fine wool as Spain; they rear them only for supplying their tables with lambs and cheese; and to have skins for dressing the people; and no attention whatever is paid to the quality of the wool, which is good for nothing, but to make the Sardinian ferges.

* Gemelli, tom. ii. p. 148.

ACADEMIES.

There is an agrarian society at Turin, which has published four volumes of papers: a patriotic society at Milan, which has published two volumes; neither of these societies hath any land for trying experiments. At Bergamo, Brescia, and Verona, there are also societies,—without land. At Vicenza, the republic has given four *campi* for the purpose of experiments. At Padua, I viewed the experimental garden, of about a dozen acres, under the direction of Sig. Pietro Arduino; the expence of which is also paid by the State. At Florence, a similar one, under the conduct of Sig. Zucchini; this was in good order.

Venice.

Perhaps no country ever had a wiser plan of conduct than the Venetians, in appointing a gentleman, supposed, from his writings, to be well skilled in agriculture (Sig. Arduino), to travel over all their dominions, to make inquiries into the state of agriculture; its deficiencies, and practicable improvements; and the idea was, that the academies of agriculture, in all the great towns of the republic, would have orders to take such steps to effect the improvements, as would most conduce to national prosperity. The plan was admirable; all, however, depends on the execution; as far as the academies are concerned, I should expect it to fail, for none of them are established upon principles, that will allow us to suppose their members skilled in *practical* husbandry; and, without this, their ideas and their experiments would of course be visionary.

It will not, perhaps, be improper to remark, under this head, that there is at Venice, an institution appointed by the State, which, though not an academy, has much the same object, but with more authority, called the *Beni Inculti*. Their origin was about 1556, and in 1768 they added the *Deputati di Agricoltura*. I was informed, that they had once great power, and did much good, but that now there lies an appeal from their tribunal, to the council of forty, which is attended with a considerable expence, and has done mischief.

SECT. II.—OF TAXATION.

PIEDMONT.—*Cbentale*.

The land-tax, near the town, is 6 liv. or 7 liv. per *giornata*, per annum, on such land as sells at 800 liv. to 1000 liv.; which may be called about one-sixth of the rent, supposing land to pay 5 per cent. The landlord, of course, pays his own capitation of 1 liv. for himself, and every one in family: and the tenant pays as much for his family, being more than seven years old. But what is abundantly worse, he pays 25*f.* a head for each cow, and 50*f.* for each ox. Salt is a monopoly: the ratio per head, is 8 lb. for every one in family, after five years old; 4 lb. for each ox and cow; and 1 lb. for each sheep and goat; and 1 lb. more per cow, for those that give milk: the price, 4*f.* the pound.

Turin.

No capitation in Turin. The *entrées* are 8*f.* the *brenta*, 50 bottles of wine; 4 *den.* per pound, meat. Salt, 4*f.* the pound. Hay, 1*f.* the *rubbio*, to the Hotel de Ville, for lighting the city. No taxes except the *entrées*. The land-tax in common, is 4 liv. the *giornata*. Salt, 8 lb. each ox or cow, and 4 lb. each goat, sheep, or calf, at 4*f.*; and if they want more, the rest 2*f.* the pound; also 8 lb. per head of the family. Capitation in the country, 1 liv. per head, for all above seven years.

*The following is a correct Detail of the Revenue of the King of Sardinia, which in 1675 amounted only to 7,000,000 liv. (306,250*l.*)*

	<i>Liv.</i>
Customs—excise and salt,	14,000,000
Land-tax, which is between 7 and 8 per cent.	6,000,000
Since 1781, the clergy their thirds of the land-tax,	500,000
Addition to the land-tax, for the Nice road,	100,000
Contribution of the Jews,	15,700
Sale of demesne lands falling into the crown,	800,000
Fees in the courts of justice,	110,000
Salt in the provinces of Alexandria and Novara,	65,460
Carry forward,	21,591,160

LOMBARDY.

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		<i>Liv.</i>
Brought forward,	- - -	21,591,160
Enrollment of all public acts and contracts,	- - -	276,100
Post-office,	- - -	300,000
Lotteries, royal powder works, glass houses, mines, salines, &c. about	- - -	3,000,000
Total, exclusive of the last article,	- - -	* 22,167,260
	Sterling, -	<u>£. 1,158,813.</u>

Expenditure.

Interest of the public debt,	- - -	* 4,738,840
Army,	- - -	† 10,700,000
Carry forward,	- - -	<u>15,438,840</u>

* The following is another account:—

Sale,	- - -	3,504,233 liv.
Tobacco,	- - -	2,415,297
Dogana,	- - -	2,377,673
Carne,	- - -	1,240,230
Carta bollata,	- - -	249,103
Polveri,	- - -	215,788
Contravenzioni,	- - -	22,340
Gabella giaeochi,	- - -	137,389
Reggio lotto del seminario,	- - -	388,487
Gran cancelleria,	- - -	162,537
Dritti insinuazioni,	- - -	44,647
Regie poste,	- - -	394,214
Domaniali,	- - -	442,884
Casuali,	- - -	1,449,548
		<u>13,044,370</u>

Sardinia, in 1783, produced 1,318,519 liv.; the population 450,000 souls.

* The debt amounts to 58,000,000 liv. originally at 4, now at $3\frac{1}{2}$ per cent. and the fund is above par. There are 17,000,000 of bank notes, which at first bore 4 per cent. then 2, and now none.

† Guards,	- - -	1,397
Fifteen regiments of the line,	- - -	17,784
Twelve regiments of militia,	- - -	7,200
Legion,	- - -	1,718
		<u>28,099</u>
Invalids,	- - -	2,400
Sundries,	- - -	1,141
		<u>31,640</u>
Infantry,	- - -	3,289
Cavalry and dragoons,	- - -	
		<u>34,929</u>
Of which foreigners,	- - -	7,536

	Liv.
Brought forward, - - -	15,438,840
Ordnance, - - -	359,044
Fortifications, royal houses, and public buildings, - -	1,458,998
Household, - - -	2,500,000
Collection of the revenue, - - -	3,572,398
King's privy purse, - - -	711,425
	<hr/> 24,040,705
Sterling, -	<hr/> £. 1,202,035

If, as calculated, there are 2882 square French leagues in the King's continental dominions, the revenue amounts to 10,920 liv. per league; and as the population is 3,000,000, it is 8 liv. $2\frac{1}{3}$ s. per head. Savoy produces 2,432,137 liv. Piedmont, 11,444,578 liv.; and the provinces acquired by the treaties of Worms and Vienna, 1,972,735 liv.

MILANESE.—*Milan.*

One liv. on the manufacture of each hat; duty of $7\frac{1}{2}$ s. per lb. on the export of silk. There are *entrées* at the gates of Milan, upon most commodities. Wine pays 42 s. the *brenta*, of 96 *bocali*, of 28 oz. or something under a common bottle. Salt in the city, is 12 s. the pound, and $11\frac{1}{2}$ s. in the country. No person is obliged to take more than they think proper.

Mozzata.

The land-tax throughout the Milanese, is laid by a *cadaastre*, called here the *censimento*; there was a map and an actual survey of every man's property taken parochially, and a copy of the map left with the community of every parish. It was finished in 1760, after forty years labour, under the Empress Maria Theresa. The lands were all valued, and the tax laid at 26 *deniers*; 1 s. 6 *den.* per *ecu*, of the fee simple. There is at Milan itself, as well as in the accounts of travellers, strange contradictions and errors about this tax; as soon as I arrived, I was told, even by very sensible men, that it amounted to full 50 per cent. of the produce. Mons. de la Lande, in his *Voyage en Italie*, tom. i. p. 291, 2d edit. says, that it is one-third of the revenue, or half the *produit net*; this is the confusion of the *economistes*, with that jargon which seems to have enveloped the plainest objects in a mist; for one-third of the revenue, is not half the *produit net*. Mons. Roland de la Platerie asserts, that it exceeds the half of the *revenu net*; but all these accounts are gross errors. The instruction of the commissaries originally, who valued the country, was to estimate

mate it below the truth; of which these gentlemen seem to have known nothing. Nor do they take into their consideration, the improvements which have been made in near thirty years; for the *cenfimento* remains as it was, no alteration having been made in the valuation; when they talk therefore of 50 per cent. or a third, or any other proportion, they must of necessity be incorrect, for no one knows the value of the whole Dutchy at present; nor can tell whether the tax be the fifth or the tenth, or what real proportion it bears to the income. When I found the subject involved in such confusion by preceding travellers, I saw clearly that the way to come at truth, was to enquire in the country, and not depend on the general assertions so common in great cities. At this place (Mozzata) therefore, I analyzed the tax, and by gaining a clear comprehension of the value, rent, produce, and tax of 100 *pertiche*, was enabled to acquire a fair notion of the subject. Under the chapter of *arable products*, I have stated that 100 *pertiche* yield a gross produce, in corn, wine, and silk, of 1836 liv.; of which the proprietor receives for his share, 785 liv. This land would sell for $128\frac{1}{3}$ liv. per *pertica*; or 12,833 liv. for the 100. Now this 100 *pertiche*, of such a rent and value, pays *cenfimento* $15\frac{1}{2}f.$ per *pertica*, or 77 liv. This tax is paid by the farmer in the above-mentioned division; but if there were no tax, the landlord would receive so much more as his portion; add therefore the tax, 77 liv. to his receipt, 785 liv. and you have 862 liv. for the sum which pays 77 liv.; which is $8\frac{3}{8}\frac{0}{4}$, or 8l. 18s. per cent. or 1s. 9d. in the pound. So utterly mistaken are the people of Milan, and the French travellers, when they talk of 50 per cent, and one-third, and one-half, the *produit net* and *revenu net*! And it is farther to be considered, that only half this payment of 77 liv. goes to the sovereign; for half is retained by the communities for roads, bridges, and other parochial charges; and in some cases, the partial support of the *curées* is included. When this happens, the payment of 1s. 9d. in the pound, is in lieu of our land-tax, tithe, and poor-rate; three articles, which in England amount to 8s. or 10s. in the pound. But though the burthen is nothing, compared with those which crush us in England, yet 1s. 9d. is too heavy a land-tax—it is throwing too great a burthen upon landed property, and lessening too much the profit which should arise from investing capitals in it; for it must be remarked, that this proportion is that of the improvements included; this 1s. 9d. might probably, twenty-five years ago, be 3s. or 3s. 6d.: it is improvements which have lowered it to 1s. 9d. at the present moment. Those silent and gradual improvements, which take place from what may be termed external causes, from the growing prosperity, and rise of prices in Europe in general. Were $8\frac{1}{2}$ per cent. to be laid on new investments, not one livre would be invested. Lands belonging to ecclesiastics and hospitals are exempted.

It

It must be sufficiently apparent, that this *censimento* must vary in every parish in the dukedom; it varies proportionably to the variation, in the accuracy of the original valuation; and to the improvements that have been made; and to many other circumstances. As it is at present, the land-owners are well satisfied, for the tax, though too heavy, is certainly not enormous; and it gives an accuracy and security to property that is of no slight value; as all mutations are made in reference to the parochial map of the *censimento*. They very properly consider any alteration in it, as a certain step to the ruin of the Milanese. It has been reported, that the Emperor has entertained thoughts of having a new valuation; but the confusion and mischief that would flow from such a scheme, might go much farther than the court could imagine; and might be attended with unforeseen consequences. In these opinions, they are certainly right; for of all the curses that a country can experience, a variable land-tax is perhaps the heaviest.

Beside the direct land-tax of the *censimento*, there is a capitation that is included in the roll, like the custom in England, of putting several taxes into one duplicate or assessment. On 15,173 *pertiche* of land, at Mozzata, there are three hundred and eighty-two heads payable, and one thousand three hundred souls. It may be calculated, that 100 *pertiche* pay the capitation of three persons, or 22½ liv.

Codogno.

The watered dairy lands, taken in general, sell here at 300 liv. the *pertica*; and lets, *net* rent, at 10 liv.; the tenant paying all taxes.—The account is thus:

Rent to landlord,	-	-	-	-	10 liv. 0 s.
Water-tax for distribution,	-	-	-	-	1 0
<i>Censimento</i> to the prince and the community,	-	-	-	-	2 5
					<hr/>
					13 5

The 1 liv. we must throw out, being local, and then 12 liv. 5 s. pays 2 liv. 5 s. which is $18\frac{20}{43}$ per cent. or 3s. 8d. in the pound; this is therefore doubly higher than in the poor country of Mozzata; one would suppose beforehand, that the case would be so. The improvements in the Lodizan are not modern; probably there are no other but such as are common to the whole Dutchy, and which arise from the general prosperity of Europe, rather than from any local efforts in this district; but in much poorer countries, the improvement of waste spots, and a husbandry gradually better, are more likely to have this effect; the fact, however, is so; there was no such difference as this, when the *censimento* was laid, which sufficiently proves that the husbandry of the poor districts, has advanced much more in thirty years, than that of the rich ones, which

which, once well watered, admitted of little more. We may remark, that even here the accounts which Messrs. de la Lande and Roland de la Platerie have given, are gross exaggerations.

Treviglio.

Upon 400 *pertiche* of land and six houses, the *censimento* amounts to 430 liv. Rent, 7, 9, and 12 liv. the *pertica*, average 8 liv. or 3440 liv. about 12 per cent. or 2s. 4d. in the pound.

Upon the land-tax in general in the Milanese, I should observe, before I quit that country, that in 1765 it was calculated* that the Dutchy of Milan contained 14,000,000 of *pertiche*, and that lakes, roads, &c. deducted, there remained 11,367,287, of which 5,098,758 were arable. It has been further stated†, that the *censimento* of the Dutchy, raised,

	liv.	f.	den.
For the Emperor,	5,106,004	11	9
Suppose as much more for the communities,	5,106,004	11	9
	10,212,009	3	6

Eleven millions of *pertiche*, paying ten millions of livres, is about 18 *soldi* per *pertica*‡.

In the *Epilogo della Scrittura Censuaria della Lombardia Austriaca*, MS. sent by Count Wilizek, prime minister of the Milanese, to the Board of Agriculture at London, the general valuation of the territory, in the *censimento*, is thus stated:

Milano,	-	-	-	40,139,942 <i>scudi</i> .
Mantova,	-	-	-	14,487,423
Pavia,	-	-	-	6,173,740
Cremona,	-	-	-	15,112,042
Lodi,	-	-	-	11,014,562
Como,	-	-	-	2,153,626
Value of the fee simple,	-	-	-	89,081,337

If therefore the tax produces but about ten millions of livres, it is not more than 2 per cent. on the above capital.

* *Bilancio dello Stato di Milano presentato a S. E. Conte di Firmian*, 12mo.

† *Delle Opere del Conte Carli*, tom. i. p. 232.

‡ Upon the taxes of the Milanese, it should be in general noted, that every father with twelve children living, or eleven living and his wife with child of a twelfth, is exempted from all personal taxes; and upon all others favoured 45 per cent. that is to say, on all royal, provincial, municipal imposts. *Delle Opere de S. Conte Carli*, 8vo, tom. i. p. 254.

STATE OF VENICE.—*Brescia.*

The land-tax amounts to $1\frac{1}{4}$ liv. per *jugero*, about 7d. the English acre; but there is a tax on all products, viz. wheat and rye pays the *soma* or *sacco*, equal to 2 *stara* of Venice, or 88 lb.; $11\frac{1}{2}$ *soldi* equal to 18 *soldi correnti*; this tax (*senza portata in Villa*) is about 5d. English the bushel. Millet, maiz, &c. pays 12 *soldi* the *sacco*, of or about $3\frac{1}{2}$ d. the English bushel. Hay, the *carro* of 100 *peze*, pays 12 *f.* $3\frac{1}{2}$ *den.* or about 6d. a ton English.

Verona.

Meadows, throughout the Veronese State, pay a tax of hay to the cavalry; furnishing it at a lower price than the common one. The land-tax here, 24 *f.* for each *campo*, or about 10d. the English acre; besides which, there are *entrées* (*dazio*) for municipal charges on all products, amounting to about 2 per cent. of the value; also others payable to the State. Hay pays 24 *f.* the *carro*: the sack of wheat, 10 *f.*: of maiz, $1\frac{1}{2}$ *f.* There is a most mischievous tax on cattle; a pair of oxen pays half a *zecchin* per annum; cows something less; and sheep also pay a certain tax per head.

Vicenza.

Salt is 6 *f.* the pound: flesh, 3 *f.* *entrée* (*dazio*): a sack of wheat, $4\frac{1}{2}$ *f.*: of flour, of 180 lb. 3 liv. 2 *f.*: and every thing that comes in pays. Land-tax, 2 liv. the *campo*: and a poll-tax of 2 liv. a head, on all above seven years old.

Padua.

The land-tax, 20 *f.* the *campo*; and 10 *f.* or 15 *f.* for the expences on rivers; but this tax uncertain.

Venice.

No tax on cattle in the Polesine. The land-tax on all the Terra Firma; arable, 2 liv. the *campo*: meadow, 1 liv. 10 *f.*: woods, 10 *f.* The sale of meat in the city is a monopoly, no other persons but those appointed being allowed to sell. *Entrées* are paid on every thing that comes in; on wine it is heavy. Tobacco is a monopoly, at a heavy price, reserved by the State throughout all the Venetian territory, producing 50,000 ducats a month, and guarded by the same infamous severities, that are found in other despotic countries. Salt the same. Inheritances, except from a father, pay 5 per cent. on the capital; a woman pays this cruel imposition, even upon her receipt from a father, or a husband. Infamous tyranny! The city of Venice pays about one-sixth of the whole revenue.

ECCLESIASTICAL STATE.—*Bologna.*

Taxation, at Bologna, is one of the most remarkable circumstances I met in Italy. I had often read, and had been generally given to understand, that the government of the church was the worst to be found in Italy; what it may be in the Roman State, I know not, but in the Bolognese it is amongst the lightest to be found in Europe. There are four objects of taxation:—1. The Pope. 2. The municipal government of the city. 3. The schools in the university. 4. The banks, &c. of the rivers, against inundations. Of all these, there is some reason to believe that the Pope receives the least share. The common land-tax is only 2 *baiocchi* the *tornatura*; this is about 2d. the English acre. Lands subject to inundations, pay 5 *baiocchi* more. Among the imposts levied in the city, wine only, and a few trifles, belong to his Holiness. Salt, fish, meat, cocoons (for there is a small duty upon them), and grinding corn, these are municipal; and among the heaviest articles of the cities expence, is the interest of about a million sterling of debt. In general, the revenue of the *dogana*, or custom-house, is applied towards supporting the lectures in the public schools, and the botanical garden. There is a light capitation, which is paid in the country, as well as in the city. Upon the whole, the amount of the taxes of every kind is so inconsiderable, that the weight is felt by nobody, and was esteemed to be exceedingly light by every person I conversed with.

TUSCANY.—*Florence.*

Every circumstance concerning taxation, in the dominions of the most enlightened Prince in Europe, must necessarily be interesting. If the reader is at all conversant with the works of the *economistes*, with which France was so deluged some years ago, he will know, that when they were refuted in argument, upon the theory of a universal land-tax, to absorb all others, they appealed to practice, and cited the example of Tuscany, in which dominion their plan was executed. I was eager to know the result; the detail I shall give, imperfect as it is, will shew on what sort of foundations those gentlemen built, when they quitted the fields of speculation and idea. I was not idle in making inquiries; but the Grand Duke has made so many changes, no year passing without some, and all of them wise and benevolent, that to attain an accurate knowledge is not so easy a business as some persons may be inclined to think. The following particulars I offer, as little more than hints to instigate other travellers, whose longer residence gives them better opportunities, to examine a subject of so much importance to the bottom.

The estimation on which the present land-tax is collected is so old as 1394; of course it can bear no proportion with the value or with the produce of the land; whatever improvements are made, the tax remains the same; much of it has been bought off in payments made by proprietors, who have paid at different periods certain sums, to be exempted forever from this tax; a singular circumstance, and which marks no inconsiderable degree of confidence in the government. That part of this tax which is paid to the communities for roads, &c. is not thus redeemable; and, without any breach of faith, the tax has received additions; it amounts to more than one-tenth of the net rent. A capitation from 1½ liv. to 4 liv. per head (the livre is 8½d. English). Every body pays this tax in the country, except children under three years of age; and all towns, except Florence, Pisa, Siena, and Leghorn, which are exempted, because they pay *entrées*. Nothing is paid on cattle. Butchers in the country pay a tax of 1*s.* per lb. (something under ½d. per lb. English); in a district of seven miles long by four or five broad, the butcher pays 500 *scudi* per annum to the prince; as this tax implies a monopoly, it is so far a mischievous one; and even a countryman cannot kill his own hog without paying 5 liv. or 6 liv. if sold. Bakers pay none. Customs on imports, and some on exports, are paid at all the ports and frontiers; and the *entrées* at the above-mentioned towns are on most kinds of merchandize and objects of consumption. Houses pay a *dixme* on their rents. Stamped paper is necessary for many transactions. The transfer of land and houses, by sale or collateral succession, pays 7 per cent. and legacies of money and marriage portions the same—a very heavy and impolitic tax. There is a *gabelle* upon salt, which however the Grand Duke sunk six months ago from 4 to 2 *gras*; he, at the same time, made Empoli the only emporium, but as that occasioned much expence of carriage, he augmented the land-tax enough to pay the loss, by selling it to the poor only at 2 *gras*; the rich pay the same, but with the addition of carriage. Tobacco was also a revenue, and, with salt, paid 1 liv. per head on all the population of the Duchy, or one million. The *entrées* above-mentioned are not inconsiderable; a calf pays 6 liv.; a hog, 5 liv. per 100 lb.; grain nothing; flour, 10 *soldi* (there are 20 *soldi* in 1 liv.); beans, 2*s.*; a load of hay, of 3000 lb. 4 liv.; of straw, under 2000 lb. 2 liv. Houses are also subjected to an annual tax; Florence pays 22,000 *scudi* a year to it: it may be supposed to be levied pretty strictly, as the Grand Duke ordered all his palaces, the famous gallery, &c. to be valued, and he pays for them to the communities. What a wise and refined policy! and how contrary to the exemptions known in England! When the capitation was increased in France, in a bad period, Louis XIV. ordered the Dauphin himself, and all the princes of the blood, to be rated to it, that the nobility might not claim exemptions. Lotteries, to my great surprize, I found established here. The domains

domains of the sovereign were considerable. It was always a part of the policy of Leopold, to sell all the farms that could be disposed of advantageously; he sold many; but there are yet many not disposed of. I found it a question at Florence, whether this were good policy or not? A gentleman of considerable ability contended against these sales, judging the possession of land to be a good mode of raising a public revenue. The opinion I think ill founded; if it be carried to any extent (and if incapable of being so, there is an end of the question), the loss by such possessions must be great: every estate is ill managed, and unprofitably, and usually badly cultivated, in proportion to the extent.—And when this evil extends to such immense possessions, as are necessary to constitute a public revenue, the inquiry is decided in a moment; and it must on all hands be agreed, that there cannot be a more expensive mode of supporting the sovereign.

From the preceding catalogue of taxes, which is very far from being complete, it may easily be concluded, that Monsi. de la Lande was not perfectly accurate in saying, “Le projet du gouvernement est de réduire toutes les taxes dans la Toscane à un impôt unique, qui se percevra sur le produit net des terres.” This is the old assertion of the *economistes*; but if it be the project of government, it is executed in a manner not at all analogous to such a system; for there is hardly a tax to be met with in Europe, which is not to be found in Tuscany. I was told, however, that the Grand Duke had formed an opinion, that such a scheme would be beneficial if executed; but from his conduct, after a reign of twenty years, it is evident that his good sense convinced him that such a plan, whether good or bad in theory, is absolutely impracticable. He may have made it a subject of conversation; but he was abundantly too prudent to venture on so dangerous, and what would prove so mischievous an experiment.

The Grand Duke gave to all the communities, the power of taxation for roads, bridges, public schools, reparations of public buildings, salaries of schoolmasters, &c. Among the long list of taxes, however, there are no excises on manufactures, such as leather, paper, &c.

The whole revenue of the Grand Duke may be estimated at one million of *scudi*, (5s. 8d. each), paid by about a million of souls, spread over a thousand square miles of territory; or 283,333l.: this is the received opinion at Florence; but there are reasons for believing it under the truth, and that, if every kind of revenue whatever were fairly brought to account, it would amount to 400,000l. a year. At this sum the Tuscans must be considered amongst the lightest taxed people in Europe; for they pay but 8s. a head. The people of England pay six times as much.

MODENA.

The common calculation in the Modenese is, that all taxes whatever equal one-fifth of the gross produce of the land; as the duties are various, such calculations must necessarily be liable to a good deal of error. In the *censimento*, or *cadastre* of the Dutchy, estates are valued at the half of their real worth, and the tax is laid at 1 per cent. annual payment of their fee simple; this amounts to 6s. in the pound land-tax; but it may be supposed that the real payment does not amount to any thing so enormous as this. It appears by the *censimento*, that in the plain, there are 67,378 pieces of land, and 738,809 *biolca*. The total revenue of Modena at present amounts to 300,000 *zecchini*, (142,000l.); 200,000 of which go to the Duke's treasure, and 100,000 for rivers, roads, bridges, communities, &c. Among the taxes, many are heavy, and complained of; beside the land-tax above-mentioned, the general farms amount to 55,000 *zecchini*: all corn must be ground at the Duke's mills, and 3 *pauls* paid for each sack of 300 lb. of 12 oz. There is a *gabelle* on salt; it sells, white, at 22 *bol.* the pound; black, 8 *bol.* Snuff is 1 *paul* the pound. They have stamped paper for many transactions. Every horse pays 20 *bol.*; each ox, 10 *bol.* Sheep and hogs, 4 *bol.*: and if any person be absent from the State for the term of a year, he pays an absentee tax. *Entrées* are paid by every thing that comes into the city; a load of wood, 20 *bol.*; a sack of wheat, 3 *bol.*; a load of hay, 20 *bol.*; of faggots, 20 *bol.* All meat, 4 *bol.* the pound. Wine, 14 liv. the measure, of 12 *poids*, each 25 lb. of 12 oz. Coffee, $\frac{2}{3}$ *paul* per lb. The sale, &c. of land, pays 5 per cent.

PARMA.

The revenues of this dukedom are two-thirds of those of Modena. The land-tax is 50*s.* the *biolca*, (about 9d. an acre). The peasants pay a capitation; this varies, if they are enrolled, or not as soldiers. A man pays 18 liv. (each 2½*d.*) per annum, if not a soldier, but 3½ liv. or 4 liv. if enrolled. A woman, not the wife of a soldier, 15 liv. These soldiers, or rather militia-men, pay also 24*s.* a month, as an exemption from service. He is enrolled for twenty-five years, after which he has the same advantage. He pays also but half for his salt, 6*s.* only the pound; others 12*s.* A metayer, who is a soldier, pays all sorts of taxes, about 60 liv.

SECT. III.—OF TITHE AND CHURCH LANDS.

PIEDMONT.

Throughout this principality, tithe is an object of no account. I made inquiries concerning it every where: the greatest part of the lands pay none; and upon the rest it is so light, as not to amount to more than from a twentieth to a fiftieth of the produce*.

MILANESE.

In the country from Milan to Pavia, no tithe of any kind, but the *curées* are supported by foundations. In the village where I made inquiries into the dairy management,—the *curée* has 21 *stara* of rice, 12 *stara* of rye, 4 *stara* of wheat; 300 lb. of the best hay from one large farm; and he has some other little stipends in nature; the amount small, and never paid as a tithe.

At Mozzata, the tithes, as every where else, are so low as to be no object; grain pays, but not on all land; it is confined to the lands *antiently in culture*†; for even the ancestors of these people were much too wise, to allow the church to tax them in such a spirit, as to take tithes of new improvements. Never did such a measure enter their heads or hearts! The titheable lands are small districts; are near to the villages that have been in cultivation many centuries; and in some of these, tithe is not taken on all sorts of corn; only on those sorts antiently cultivated. The variations in this respect are many; but on whatever it is taken, it never exceeds a sixteenth, usually from one-seventeenth to one-twentieth; and of such as are levied, the whole does not belong to the *curée*, not more perhaps than one-fourth; one-half to the canons of some distant church, to which the whole probably once belonged; and one-fourth sold off to some lay-lord, with a stipulation to repair the church. The variations are so great, that no general rule holds; but they are every where so light, that no complaints are heard of them.

The church lands seized by the late Emperor in the Milanese, were of immense value. From Pavia to Plaisance, all was in the hands of the monks; and the Count de Belgioso has hired thirty-six dairy farms of the Emperor, by

* Tithe in Sardinia is heavy. They pay one-tenth of the corn, and one-ninth of that one-tenth for threshing, and one-fifth of the one-tenth for carriage.—*Risforimenti della Sardegna*, tom. i. p. 146.

† A remarkable passage in Giulini deserves noting here; under the year 1147, he gives *finalmente si proibisce a ciascheduno essigere le decima dai terreni di nuovo coltivati*, tom. v. p. 459.

which

which he makes a profit of 50,000 liv. a year. The revenue that was seized, in the city of Milan only, amounted to above 5,000,000 liv.; and they say in that city, that in the whole Austrian monarchy, it amounted to 20,000,000 florins.

At Codogno, and through most of the Lodizan, tithe is so very inconsiderable, that it is not worth mentioning; the expression of the gentlemen who were my informants.

STATE OF VENICE.

In the district of Verona, mulberries pay no tithe; wheat one-twelfth in some places, in others less; maiz, millet, &c. from one-fifteenth to one-thirtieth; but if for forage only, they pay none, no more than vetches, chich-pease, millet, &c. as it appears by a late memoir printed at Venice*. Meadows pay a light tithe, because they are taxed to find hay for the cavalry at an under price. In the district of Vicenza, tithe varies from the one-tenth to the forty-first. About Padua, wheat alone pays the tenth: vines a trifle, at the will of the farmer: mulberries, sheep, and cows, nothing.

ECCLESIASTICAL STATE.—*Bologna.*

Tithes are so low throughout all the Bolognese, that I could get no satisfactory account of the very small payments that are yet made to the church; every one assured me, that they were next to nothing; but that in the Ferrarese they are high.

TUSCANY.

In many of the countries of Europe, the seizure of estates and effects of the jesuits was a rapacious act, to the profit of the Prince or State; in Tuscany it was converted to a more useful purpose. The Grand Duke set aside these revenues for forming a fund, called the *Ecclesiastical Patrimony*, under the management of a new tribunal, that should enable him gradually to abolish tithes. This great reform, equally beneficial to every class of the people, has been in execution for many years: as fast as the present incumbents of the livings die, tithes are abolished for ever; their successors enter into possession of moderate salaries, payable out of those funds, or raised by an addition to the land-tax; and thus an impost, of all others the most mischievous, is speedily extinguishing, and the agriculture of Tuscany improving in consequence; proportionably to such extinction of its former burthens. Many monasteries have been also suppressed, and their revenues applied, in some cases, to the same use; but this

* *Raccolto di Memorie Delle Pubbliche Accademie*, 8vo, 1789, tom. i. p. 197.

has not been attended with effects equally good: the lands are not equally well cultivated; nor do they yield the same revenue as formerly; for the farms of the monks were in the best order, administered by themselves, and every thing carefully attended to. This was not the case, however, with convents of women, who being obliged to employ deputies, their estates were not equally well managed.

A proposition was lately made by the court, to sell all the glebes belonging to the livings, and to add to the salaries of the *curées* in lieu of them; but at a public meeting of the Academia di Georgofili, Sig. Paoletti, a *curé* in the neighbourhood of Florence, a practical farmer, and author of some excellent treatises on the art, made a speech so pointedly against the scheme, fraught with so much good sense, and delivered with so much eloquence, that the plan was immediately dropped, and resumed no more; this was equally to the honour of Paoletti and of Leopold. When good sense is on the throne, subjects need not fear to speak it.

The lightness of the old tithes may be estimated, by the payment which forty farms at Villamagna yield to the same Sig. Paoletti, the *curé*, which is 40 *scudi* (each 5s. 8d.), and this is only for his life; to his successor nothing in this kind will be paid. Having mentioned Sig. Paoletti, and much to his honour, I must give another anecdote of him, not less to his credit; after his Sunday's sermon, it has long been his practice to offer to his audience, some instruction in agriculture; which they are at liberty to listen to, or absent themselves, as they please. For this practice, which deserved every commendation, his archbishop reproved him. He replied, that he neglected no duty by offering such instruction, and his congregation could not suffer, but might profit, and innocently too, by what they heard. A sovereign that receives so much merited praise as the great Leopold, can well afford to hear of his faults; first, why did he not reprove this prelate, for his conduct; and by so doing encourage an attention to agriculture in the clergy? secondly, why did he not reward a good farmer, and worthy priest, and excellent writer, with something better than this little rectory? Talents and merit in an inferior situation, which might be better exerted, are a reproach, not to the possessor, but to the prince.

The Grand Duke took the administration of the lands belonging to hospitals and the poor into his own hands also; but the effect of this has not, in the opinion of some persons, been equally beneficial; the poor remain as they were, but the revenue gone; this, in the diocese of Florence only, amounted, it is said, to three or four millions of *scudi*: if this be true, the mischief attending such revenues must be enormous; and taking them away, provided the *really useful* hospitals be supported, which is the case, must be beneficial. Too many and

great establishments of this nature nurse up idleness; and create, by dependency and expectation, the evils they are designed to cure. Poverty always abounds in proportion to such funds; so that if the fund were doubled, the misery it is meant to prevent would be doubled also. No poor in the world are found at their ease by means of hospitals, and gratuitous charities; it is an industry, so steady and regular, as to preclude all other dependence, that can alone place them in such a situation, as I have endeavoured to shew in my remarks on France.

The patrimony of almost all the parishes in Tuscany, consists in lands assigned them: the rector is administrator and guardian of them; and, both by law and his oath on induction, he is strictly obliged to maintain and support them; and also to manure them, and to increase the produce*.

DUTCHY OF MODENA.

No tithe here; a voluntary gift only to the *sub-curée*. The ecclesiastical lands have been largely seized here, as well as every where else in Italy; but the Duke gave them to the towns, to assist them in the expence of the municipal administration.

DUTCHY OF PARMA.

No real tithe; the payments in lieu very small, and not proportioned to the crop; a farm pays a *stajo* of wheat, (about 88 lb. English), two parcels of raisins, and twenty faggots, between the two *curées*.

Upon this detail of the tithe paid in Lombardy, &c. one observation strongly impresses itself, that the patrimony of the church is, under every government in Italy, considered as the property of the State, and seized or assigned accordingly. It highly merits attention, that in the free countries of Holland and Switzerland, (exempt at least from the despotism of a single person), the same principle has been adopted; with what reason therefore can the *first* National Assembly of France be reproached, as guilty of a *singular* outrage, for doing that which every neighbour they have (England and Spain only excepted) had done before them; and which may possibly, in a better mode, be followed in every country in Europe? They have in Italy rid themselves of tithes, though not half, perhaps not upon an average a third, of the burthen they amount to in England, where their levy has been carried to a

* Paoletti *Penfieri sopra l'Agricoltura*, 8vo. Firenze, 1789. p. 50. 2d edit.

much greater height. If the legislature of that kingdom would give a due encouragement, they will remove such burthens gradually, and with wisdom. All I conversed with in Italy, on the subject of tithes, expressed amazement at the tithes we are subject to; and scarcely believed that there was a people left in Europe, who paid so much: observing, that nothing like it was to be found even in Spain itself.

SECT. IV.—OF MANUFACTURES AND COMMERCE.

PIEDMONT.

Two-thirds of the rice raised is exported: I met carts loaded with silk and rice on the great road to France; and demanding afterwards concerning this trade, I was informed, that the cost of the carriage was 30*s.* per *rubbio*, to Lyons or Geneva, and 3 liv. to Paris.—The following are the principal exports:

	<i>Liv.</i>
Unwrought silk,	17,000,000
Damasks, &c.	500,000
Rice,	3,500,000
Hemp,	1,500,000
Cattle,	2,000,000
	<hr/>
	24,500,000

Oil and wine from Nice; walnut-oil, cobalt, lead, and copper ore, add something. France commonly takes 10,000,000 liv. in silk, and England 5,000,000 liv. of the finest sort. The balance of trade is generally supposed to be about 500,000 liv. against Piedmont; but all suppositions of this sort are very conjectural; such a country could not long continue to pay such a balance; and, consequently, there cannot be any such. By another account, wheat exported is 200,000 sacks, at 5 *eymena*; 5000 sacks of rice, at 3 *eymena*; hemp, 5000 quintals; and 10,000 head of oxen.

Turin.

The English woollen manufacturers having sworn, at the bar of the House of Lords, that the French camblets, made of English wool, rivalled the English camblets in the Italian markets, and even undersold them, I had previously

determined to make inquiries into the truth of this assertion. I was at Turin introduced to Sig. Vinatier, a considerable shopkeeper, who sold both. His account of the French and English camblets was this; that the English are much better executed, better wrought, and more beautiful; but that the French are strongest. I desired to know which were the cheapest. The English, he said, being much the narrower, it was a matter of calculation; but he supposed the consumers thought the English cheapest, as where he sold one French, he sold at least twenty-five English. He shewed me various pieces of both, and said, that the above circumstances were applicable both to stuffs mixed of wool and silk, and also those of wool only. I asked him then concerning cloths: he said, the English ordinary cloths were much better than the French, but that the French fine cloths were better than the English. These inquiries brought me acquainted with an Italian dealer, or merchant as he is called, in hardware, who informed me, that he was at Birmingham in 1786 and 1789, and that he found a sensible diminution of price; and that the prices of English hardware have fallen for some years past; and that, for these last three or four years, the trade in them to Italy has increased considerably. He has not only bought, but examined with care, the fine works in steel at Paris, but they are not equal to the English; that the French have not the art of hardening their steel; or if hardened of not working it; for the English goods are much harder and better polished, consequently, are not equally subject to rust.

MILANESE.

In the fifteenth century, the trade of this country was considerable. In 1423, the territory of Milan paid to the Venetians:

Milan,	-	-	-	900,000 ducats.
Monza,	-	-	-	52,000
Como,	-	-	-	104,000
Alessandria,	-	-	-	52,000
Tortona and Novara,	-	-	-	104,000
Pavia,	-	-	-	104,000
Cremona,	-	-	-	104,000
Bergamo,	-	-	-	78,000
Parma,	-	-	-	104,000
Piacenza,	-	-	-	52,000
				<u>1,654,000</u>

And

And they sent to Venice, at the same time, cloths to the following amount :

	<i>Cloths.</i>	<i>Ducats.</i>
Alessandria, Tortona, and Novara, at 15 ducats,	6000 -	90,000
Pavia, at 15 ducats,	3000 -	45,000
Milan, at 30 ditto,	4000 -	120,000
Como, at 15 ditto,	12,000 -	180,000
Monza, at 15 ditto,	6000 -	90,000
Brescia, at 15 ditto,	5000 -	75,000
Bergamo, at 7 ditto,	10,000 -	70,000
Cremona, at 40½ ditto,	40,000 -	170,000
Parma, at 15 ditto,	4000 -	60,000
	<hr/> 90,000	<hr/> 900,000
Duties and warehouses,	-	200,000
Canvas,	-	100,000

And at the same time the Milanese took from Venice annually :

Cotton raw, 5000 <i>miliari</i> ,	250,000 ducats.
Cotton spun,	30,000
Wool of Catalonia, 4000 <i>miliari</i> ,	120,000
French wool,	120,000
Gold and silk fabrics,	250,000
Pepper,	300,000
Soap,	250,000
Cinnamon,	64,000
Ginger,	80,000
Slaves,	30,000
Sugar,	95,000
Materials for embroidery,	30,000
Dying woods,	120,000
Indigo, &c.	50,000 *

The produce of silk amounts to 9,000,000 liv. ; nineteen-twentieths of which, at least, are exported.

Count Verri, in his *Storia di Milano*, mentions that the Milanese, only sixty miles by fifty, feeds 1,130,000 inhabitants ; and exports to the amount of 1,350,000 *zecchini* †, viz. silk, 1,000,000 ; cheese and flax, more than 200,000 ; corn, 150,000 (the *zecchini* being 9s. 6d. the sum of 1,350,000 equals 641,200l.)

* Giulini, vol. xii. p. 362.

† Verri, tom. i. p. 236.

But this is changed much, for the export of cheese alone is calculated now at 9,200,000 liv. which is above 306,000l. sterling.

Bergamo.

The woollen manufacture at this place is of great antiquity, and it is yet considerable. Its trade in silk is great; they buy from Crema, Monti, Brianza, Ghiara d'Adda, and in general the confines of the Milanese; this has given their silk trade a greater reputation than it deserves, for their commerce is more extensive than their product. They have been known to export silk, to the amount of near 300,000l. sterling a year. Here also is a fabric of iron and steel, of some consideration in Italy; but none of these objects are in a stile to be interesting to those who have been at all conversant with the fabrics of England. If, however, the manufactures of Bergamo are compared with those of the Milanese, they will be found considerable.

Brescia.

This is a very busy place; the city and the vicinity, for some miles, abound with many fabrics, particularly of fire-arms, cutlery, and other works of iron. They have many silk and oil mills; and some paper fabrics, that succeed well. But their commerce of all sorts has declined so much, as not to be compared at present, to what it has been in former times.

Verona.

Here is a woollen fabric that still maintains some little ground; though the declension it has suffered is very great. I was assured, that 20,000 manufacturers were once found in a single street; this, I suppose, may be an exaggeration, but it at least marks that it was once very great: now there are not 1000 in the whole city; in the time of its prosperity, they used chiefly their own wool, at present it is imported.

In the Veronese, they make one million of pounds of silk, of 12 oz.; and rice nearly to as great an amount.

STATE OF VENICE.—*Verona.*

Many years past, the only great import of camblets was from Saxony; but after the war of 1758, the English ones established themselves, and there is now no comparison between the quantity of English and French; of the latter, very few, but the import of the former is considerable.

Vicenza.

Vicenza.

They sell nine pieces of English camblets to one of French. A woollen manufacture was established here three years ago, under the direction of Thomas Montfort, an Englishman. It works up their own wool, and also Spanish. Spinning a pound of fine wool, 50*s.* and the women earn 15*s.* a day; weavers, 2 *liv.* Count Vicentino has established a fabric of earthen ware, with a capital of 9000 ducats; Mr. Wedgwood's forms (originally however from Italy) are imitated throughout. A good plate, plain, 12*s.*; ewer and basin, 12 *liv.*; small tea-cup and saucer, quite plain, 15*s.*; tea-pot, 4 *liv.*; vase, 18 inches high, with a festoon and openings for flowers, 60 *liv.* It meets with no great success, and no encouragement from the government.

Venice.

In the fifteenth century, Venice employed 3345 ships, great and small, and 43,000 sailors*. The chief export at present, is silk; the second, corn of all sorts; the third, raisins, currants, and wine. Glass is yet a manufacture of some consequence, though greatly fallen, even of late years. Tuly for beads, is, however, yet unrivalled. The glass of Bohemia underfells, from the great cheapness of wood, and possibly from that of provisions (my informant speaks), not only the glass of Venice, but that of Carniola also. The chief export from Venice, of fabrics, is to the Levant; velvets and silks go there to some amount. The trade of the whole Venetian territory, does not employ above 250 ships of national bottoms.

ECCLESIASTICAL STATE.—*Bologna.*

All the silk of the Bolognese, is here made into crape and gauze; the crapes are, perhaps, the finest in the world, price considered. The gauzes also are very beautiful: they measure by the *braccio* of forty inches; they sell at 26 to 36 *baiocchi* the *braccio*; (10 *baiocchi* equal 6d. English). White handkerchiefs are also made of 7 *liv.* each. Crapes and gauzes employ seven or eight thousand people.

TUSCANY.—*Florence.*

The woollen manufacture was amongst the greatest resources of the Florentines, in the time of their republic.

* *Ragionamento sul Commercio, &c. della Toscana*, 8vo, 1781, p. 21.—*Marino Sanudo tra gli Scrittori Italici del Muratori*, tom. ii.—*Conte Carli delle Monete*, tom. iii. dis. 7.—*Mehegan Tableau de l'Hist. Moder.* tom. ii. epog. 7.

In 1239, the friars umiliate came to Florence, to improve the manufactory of woollen cloth. They made the finest cloths of the age; the best, of the wool of Spain and Portugal; the seconds, of that of England, France, Majorca, Minorca, Sardinia, Barbary, Apulia, Romana, and Tuscany*. In 1336, there were at Florence, more than two hundred shops, in which woollens were manufactured, which made from 70 to 80,000 pieces of cloth yearly, of the value of 1,200,000 *zecchini*; of which, the third part remained in the country for labour; and employed more than 30,000 souls; and thirty years before that, the number was much greater, even to 100,000 pieces, but coarser, and of only half the value, because they did not receive, nor know how to work the wools of England. In 1460, they were augmented to two hundred and seventy-three, but the quality and quantity unknown†. From 1407 to 1485, was the period of its greatest prosperity. In 1450, Cosmo of Medicis, was the greatest merchant in Europe. From the year 1365 to 1406, the republic of Florence, in wars only, expended 11,500,000 *zecchini*‡.

I was assured at Florence, but I know not the authority, that 1*l.* a week, on the wages of the woollen manufacturers only, built the cathedral; and that at a single fair, in the time of the republic, woollen goods to the amount of 12,000,000 of crowns have been sold.

Giuliano and Lorenzo de Medici sent into England Florentine manufacturers of wool, to exercise their trade, for the account of those princes to take advantage of the cheapness of wool on the spot; from which circumstance, the Florentine writer infers, that the English thus gained the art of making cloth§.

These particulars, it must be confessed, are curious, but I must draw one conclusion from them, which will militate considerably with the ideas of those persons, who insist that the only way of encouraging agriculture is to establish great manufactures. Here were, for three centuries, some of the greatest fabrics, perhaps the greatest in Europe; and Pisa flourished equally; and yet the establishment and the success of a vast commerce, which gave the city immense riches, the signs of which are to be met with at this day, in every part of it, had so little effect on the agriculture of Tuscany, that no person skilled in husbandry can admit it to be well cultivated; and yet the improvements in the last twenty years are, I am assured, very great. Here then is a striking proof, that the prodigious trade of the Tuscan towns had little or no effect in securing a flourishing agriculture to the country. These great political questions, are not to be decided by eternal reasonings—it is by recurring to facts

* *Ragionamento Sopra Toscana*, p. 39.

† *Ib.* p. 39, from Giovanni Villani, Francesco Balducci, Giovanni da Uzzano Benedetto Dei.

‡ *Cristofano Landino Apologia di Dante*.

§ *Ragionamento Sopra Toscana*, p. 61.

alone, that satisfaction can be gained. No wonder that the rich deep soils of Lombardy and Flanders have been well applied; but the more ungrateful and sterile hills of Tuscany remain (at least what I have seen of them) wild and unimproved.

There is yet a woollen manufacture of some consideration, and they make fine cloths of Vigonia wool; also hats; and various fabrics of silk.

The export of woollens from Tuscany in 1757, was 120,000 lb.; and in 1762, it was 180,000 lb.*

Among the silk manufactures, here are some good, and pretty satins, 18 *pauls* (the paul 5½d.) the *braccio*, (about two feet English), the width one *braccio* four inches.

The silk spun in Tuscany in ten years, from 1760 to 1769 inclusive, amounts to 1,676,745 lb.; or per annum, 167,674 lb.; and in the first sum is comprised 286,979 lb. of cocoons, bought of foreigners †. The silk manufacture amounts to a million of crowns, (7 liv. 10s. of Tuscany ‡). Of oil, the export is about 100,000 *barrils*. The year following the edict for the free commerce of oil and grain, the export amounted to 600,000 *scudi* §. Next to oil, hogs are the greatest export, to the amount of from 20 to 30,000 in a year.

The average of the quantity of silk made in Tuscany, and registered in the tribunal of Florence, from 1769 to 1778, was 165,168 lb.; and the import of foreign silk, 48,470 lb.; together, 213,649 lb. yearly ||.

MODENA.

In 1771, the following were the exports of the Modenese:

	<i>Liv.</i>
Brandy, 50,000 <i>poids</i> ,	593,280
Wine, 150,000 ditto,	428,222
Oxen, 5,232 head,	1,569,600
Cows, 3,068 ditto,	613,400
Calves, one year, 500 ditto,	69,150
Wethers and goats, 23,500 ditto,	141,048
Hogs, 11,580 ditto,	347,280
Pigs, 21,900 ditto,	329,145
Linen, hemp, sacks, &c. 1,800,000 <i>braccio</i> ,	1,442,327
Carry forward,	5,533,452

* *Ragionamento Sopra Toscana*, p. 183.

† *Pensieri Ap. Apol.* p. 56. ‡ *Ib.* p. 57. § *Ib.* p. 59.

|| *Ragionamento Sopra Toscana*, p. 161.

L O M B A R D Y.

					<i>Liv.</i>
	Brought forward,	-	-	-	5,533,452
Hogs salted, 1,900 poids,	-	-	-	-	24,479
Poultry,	-	-	-	-	24,342
Hats of straw and chip,	-	-	-	-	145,308
Ditto of woollen,	-	-	-	-	23,205
Gross fabricks of wool,	-	-	-	-	83,362
Butter,	-	-	-	-	106,240
Hemp, spun or prepared, 13,900 poids,	-	-	-	-	348,000
Wax,	-	-	-	-	74,400
Silk, 77,650 lb.	-	-	-	-	3,897,312
Honey,	-	-	-	-	15,350
Cheese,	-	-	-	-	98,556
Chestnuts,	-	-	-	-	17,440
Fruit,	-	-	-	-	81,320
					<hr/> 10,472,766 <hr/>

All these are by the registers of the farms ; the contraband is to be added.—
Exportation is now greater than in 1771.

PARMA.

The first trade and export of the country is silk ; the next cattle and hogs.

There is but one conclusion to be drawn from this detail of the commerce of Lombardy, namely, that eighteen-twentieths of it consist in the export of the produce of agriculture, and therefore ought rather to be esteemed a branch of that art, than of commerce, according to modern ideas ; and it is equally worthy of notice, that thus subsisting by agriculture, and importing manufactures, these countries must be ranked among the most flourishing in the world ; abounding with large and magnificent towns ; decorated in a manner that sets all comparison at defiance : the country every where cut by canals of navigation or irrigation ; many of the roads splendid ; an immense population ; and such public revenues, that if Italy were united under one head, she would be classed among the first powers in Europe.

When it is considered, that all this has been effected generally under governments not the best in Europe ; when we farther reflect, that England has for a century enjoyed the best government that exists, we shall be forced to confess, perhaps with astonishment, that Great Britain has not made considerable advances in agriculture, and in the cultivation of her territory. The wastes of the three kingdoms are enormous, and far exceeding, in proportional extent, all that are to be found

found in Italy; while, of our cultivated districts, there are but a few provinces remarkable for their improvements. Whoever has viewed Italy with any degree of attention, must admit, that if a proportion of her territory, containing as many people as the three British kingdoms, had for a century enjoyed as free a government, giving attention to what has been a principal object, viz. agriculture, instead of trade and manufacture, they would at this time have made almost every acre of their country a fertile garden; and would have been in every respect a greater, richer, and more flourishing people than we can possibly pretend to be. What they have done under their present governments, justifies this assertion: we, blessed with liberty, have little to exhibit of superiority.

What a waste of time to have squandered a century of freedom, and lavished a thousand millions sterling of public money *, in questions of commerce! He who considers the rich inheritance of a hundred years of liberty, and the magnitude of those national improvements, which such immense sums would have effected, will be inclined to do more than question the propriety of the political system, which has been adopted by the legislature of this kingdom, that in the bosom of freedom, and commanding such sums, has not, in the agriculture of any part of her dominions, any thing to present which marks such expence, or such exertion, as the irrigation of Piedmont and the Milanese.

SECT. V.—OF POPULATION.

MILANESE.

In all Austrian Lombardy there are 1,300,000 souls.

In 1748, the population was about 800,000; and in 1771, it was 1,130,000. The Milanese contains 3000 square miles†. In 1732, there were 800,000 *pertiche* uncultivated; in 1767, only 208,000. In a square mile, of sixty to a degree, there are, in the Milanese, 354 souls. There are in the Dutchy, 11,385,121 *pertiche*, at 4868 *pertiche* in a square mile; and there are in the State, exclusive of roads, lakes, rivers, &c. 2338 square miles‡, and 377 persons per square mile, which is certainly very considerable; and, that my readers may have a clearer idea of this degree of population, I shall remark, that to equal it, England should contain 27,636,362 souls§.

* *Sir John Sinclair's History of the Public Revenue*, vol. ii. p. 98.

† *Delle Opere del S. Conte Carli*, 1784, tom. i. p. 132.

‡ *Ib.* p. 319.

§ At 73,306 square miles each of 640 acres.

VENETIAN STATE.—*Padouan.*

In the whole district of the Padouan, there were, in 1760, 240,336 souls: in 1781, they were 288,300: increase 47,914. There is probably no corner of Europe, barbarous Turkey alone excepted, in which the people do not increase considerably—we ought not therefore in England, to take too much credit for that rapid augmentation which we experience. It is found under the worst governments, as well as under the best, but not equally.

Venice.

The population of the whole territory, 2,500,000: of the city, between 143 and 149,000, the Zuedecca included.

In Friuli, in 1581, there were 196,541; and in the city of Udine, 14,579. In 1755, in Friuli, 342,158; and in Udine, 14,729*. The population of all the States of Venice, by another authority, is made 2,830,000; that is 600,000 in Bergamo, Brescia, &c.: in the rest of the Terra Firma, 1,860,000: in Dalmatia and Albania, 250,000: in the Greek islands, 120,000†. In the time of Gallo, who died in 1570, there were said to be in the Brescian, about 700,000 souls; in 1764, there were 310,388‡.

TUSCANY.

The progressive population of Florence is thus shewn, by Sig. Laftri:

1470 §,	-	-	-	-	40,323
1622,	-	-	-	-	76,023
1660,	-	-	-	-	56,671
1738,	-	-	-	-	77,835
1767,	-	-	-	-	78,635

The total population of the Dukedom, is calculated at about 1,000,000**. Two centuries ago, the population of the fields in the mountains, and on the

* *Gemelli*, vol. ii. p. 16. † *Della Piu' utile Ripartizione de' Terreni, &c. San Martino*, 4to, p. 13.

‡ *Gallo Vinti Giornata*, Brescia, 1773, p. 413. § *Decima*, tom i. p. 232.

|| *Ricerche sull' Antica e Moderna Popolazione della Citta di Firenze*, 4to, 1775, p. 121. Sig. Paoletti is a sensible writer, and a good farmer, but he is of Dr. Price's school,—“L' antica popolazione della Toscana era certamente di gran lunga superiore a quella de' nostri tempi;”—from Boccaccio, he makes 100,000 to die in Florence, of the plague in 1348; yet, in little more than a century after, there was not half the number in the city; he admits, however, that this is *esagerato*. *Pensieri Sopra l' Agricoltura*, p. 18.

** *Ivere Mezzi Paoletti*, p. 58.

sea-coast, was little less than double what it is at present. And there is said to have been the same proportion in the cultivation and cattle*.

M O D E N A.

State of the Dutchy in 1781:

Ecclesiastics,	-	-	-	8,306
Infants, under fourteen years of age,	-	-	-	50,291
Girls, ditto,	-	-	-	49,516
Men,	-	-	-	115,464
Women,	-	-	-	124,822
Total				<u>348,399</u>

Marriages, 2,901; births, 12,930; deaths, 10,933. Multiplying the births therefore by 27, gives nearly the population; or the deaths by 41.—Of this total, the following are in the mountain districts:

Carrara,	-	-	-	8,865
Maffa,	-	-	-	11,070
Garfagnana,	-	-	-	22,242
Varano,	-	-	-	629
Castel Nuovo,	-	-	-	14,576
Frignano,	-	-	-	19,526
Montefiorino,	-	-	-	15,721
Montefe,	-	-	-	19,694
Total				<u>112,323</u>

The rest in the plain.

P I E D M O N T.

Subjects in the King of Sardinia's territories, 3,000,000. In Savoy, 400,000. In Sardinia, 450,000. In Turin, in 1765, 78,807. In 1785, it was 89,185. In 1785, births 3394; deaths 3537.

* *Differtazione sulla la Moltiplicazione del Bestiame Toscano.* Andreucci, 8vo, 1773, p. 14.

OF THE POOR.

MILANESE.—*Milan.*

Charitable foundations, in the city only, amount to 3,000,000 liv. (87,500l. sterling). In the great hospital, there are commonly from twelve to fifteen hundred sick: the effect is found to be exceedingly mischievous, for there are many that will not work, depending on these establishments.

Mozzata.

The labourers here work in summer thirteen hours. Breakfast one hour; dinner two hours; merenda one hour; supper one hour; sleep six hours. They are not in a good situation. I was not contented to take the general description, but went early in a morning, with the Marquis Visconti and Sig. Amoretti, into several cabins, to see and converse with them. In this village they are all little farmers: I asked if there were a family in the parish without a cow, and was answered expressly there was not one, for all have land. The poorest we saw had two cows and 20 *pertiche*; for which space he paid five *moggio* of grain, one-third wheat, one-third rye, and one-third maiz. Another, for 140 *pertiche*, paid 35 *moggio*, in thirds also. The poor never drink any thing but water; and are well contented if they can manage always to have bread or polenta; on Sunday they make a soup, into which goes perhaps, but not always, a little lard; their children would not be reared, if it were not for the cow. They are miserably clad; have in general no shoes or stockings, even in this rainy season of the year, when their feet are never dry; the other parts of their dress very bad. Their furniture but ordinary, and looks much worse from the hideous darkness from smoke, that reigns throughout; yet every cabin has a chimney. They have tolerable kettles, and a little pewter; but the general aspect miserable. Fuel, in a country that has neither forests nor coal-pits, must be a matter of difficulty, though not in the mountains. They were heating their kettles, with the ears of maiz, with some heath and broom. In the cold weather, during winter, they always live in the stable with their cattle, for warmth, till midnight or bed-time. For day labour they are paid 10s. a day in winter, and 12s. in summer. For a house of two rooms, one over the other, the farmer of 20 *pertiche* pays 24 liv. a year; that is to say, he works so much out with his landlord, keeping the account, as in Ireland, with a tally, a split stick notched. They are not, upon the whole, in a situation that would allow any one to approve of the system of the poor being occupiers of land; and are apparently in much more uneasy circumstances,

cumstances, than the day labourers in the rich watered plain, where all the land is in the hands of the great dairy farmers. I drew the same conclusion from the state of the poor in France; these in the Milanese strongly confirm the doctrine; and unite in forming a perfect contrast, with the situation of the poor in England, without land, but with great comforts.

STATE OF VENICE.

The people appear, in the districts of Bergamo, Brescia, Verona, and Vicenza, to be in better circumstances than in the Padouan. And from thence to Venice, there are still greater appearances of poverty: many very poor cottages, with the smoke issuing from holes in the walls.

Villamagna.

The peasantry, a term which, in all countries where the landlord is paid by a share of the produce, and not a money rent, includes the farmers, who are consequently poor, live here better than in districts more distant from the capital; they eat flesh once a week; the common beverage is the second mash, or wort, of the wine; eat wheaten-bread; and are cloathed pretty well.

SECT. VI.—OF PROHIBITIONS.

PIEDMONT.

The exportation of the cocoons of silk is prohibited; and the effect highly merits the attention of the politician, who would be well informed, from practice, of the principles of political œconomy. It is a perishable commodity, and therefore it is not at all likely, that if the trade were free, the quantity sent out would be any thing considerable; yet, such is the pernicious effect of every species of monopoly, upon the sale of the earth's products, that this prohibition sinks the price 30 per cent. While the cocoons sell in Piedmont at 24 liv. the *rubbio*, they are smuggled to the Genoese at 30 liv.; which export takes place in consequence of the monopoly having sunk the price. The object of the law is to preserve to the silk-mills, the profit of converting the silk to organzine; and for this object, so paltry on comparison with the mischief flowing from it, the land-owners are cheated in the price of their silk 30 per cent.: the State gains nothing; the country gains nothing; for not a single pound would be exported if the trade were free, as the motive for the export would then cease, by the
price

price rising: the only possible effect is, that of taking 30 per cent. on all the silk produced out of the pockets of the grower, and putting it into those of the manufacturer. A real and unequivocal infamy; which reflects a scandal on the government, for its ignorance in mistaking the means of effecting its design; and for its injustice, in fleecing one class of men, for the profit of another. I demanded why the Piedmontese merchants could not give as good a price as the Genoese. "*They certainly could give as good a price, but as they know they have the monopoly, and the seller no resource in an export, they will have it at their own price; and if we do not give them this profit of 30 per cent. we cannot sell it at all.*" What an exact transcript of the wool laws in England!

Another prohibition here, not equally mischievous, but equally contrary to just principles, is that of keeping sheep in summer, any where in or near the plain of Piedmont; it is not easy to understand, whether the object of this law is, that the sheep at that season *shall* be kept in the mountains, or that they *shall not* be kept in the plain. In winter they are allowed every where. The shepherds buy the last growth of the meadows, at 5 liv. or 6 liv. per *giornata* for them; and pay for such hay, as may be wanted in frost or snow.

Corn from Sardinia is not allowed to be exported, but when the quantity is large, and then paying a heavy duty, yet this is the only commodity of the island; and the execrable policy that governs it, has rendered it one of the most wretched deserts that is to be found in Europe*. On account of this duty, they pay no land-tax†. No wonder that the authors of such a policy want to sell their inheritance!

MILANESE.

The export of cocoons are here also prohibited; and as it is rather more severely so than in Piedmont, the price is of course something lower. The duty on the export of silk, is 7½s. per pound.

Keeping sheep in the vale of the Milanese, every where prohibited by government, from the notion that their bite is venomous to rich meadows. The same in the Veronese; and there is a dissertation in the Verona Memoirs in favour of them.

STATE OF VENICE.—Brescia.

The cultivation of the mountains is every where prohibited in this republic, lest the turbid waters falling into the Lagunes, should fill up those channels, and unite Venice with the Terra Firma. Mr. Professor Symonds has remarked

* *Riformamento della Sardegna*, tom. i. p. 3.

† *Ib.* p. 147.

the ill effects of cutting woods on the mountains, relative to the mischief which rivers in that case do to the plains; it is suspected in Italy, that there are other reasons also; and they have observed in the territory of Aqui, in Piedmont, that hail has done more mischief since the woods have been cut down, in certain districts of the mountains, between the Genoese territory and Montferat*.

Verona.

The export of wheat is prohibited when the price exceeds 24 liv. the sack, of 11 *pefi*, of 25 lb.; 11 *pefi* are 205 lb. English; and therefore 24 liv. equals 26s. 6d. per quarter English, of 456 lb.; apparently a regulation that is meant as an absolute prohibition. The export of maiz is also prohibited, when it reaches a certain price, proportioned to this of wheat. The export of cocoons and unspun silk prohibited.

Vicenza and Padoua.

The export of cocoons prohibited.

Venice.

The export of wool, from the Venetian territory, has been always prohibited. The export of wheat is prohibited, when the price arrives at 22 liv. the *saccho*; but so much depends on the magistrate, that there is no certainty, and consequently the trade crippled. The *stajo*, or *staro Veneziano* of wheat, is 133 lb. *grosso*; 4 *stari* 1 *mozzo*. The sack of flour is 204 lb. to 210 lb.† The sack of wheat 132 lb. *grosso*‡. As the Venetian pound is about one-twentieth heavier than the English, 22 liv. the sack about equals, not exactly, 36s. the English quarter, but the ratio of the price is of little consequence, in laws, the execution of which depends on the will of the magistrate||. Another prohibition, which marks the short and fallacious views of this government, on every object but that of their own power, is in the duration of leases; no person is allowed to give a longer one than for three years; which is in fact, to declare by law, that no renter shall cultivate his farm well.

ECCLESIASTICAL STATE.—*Bologna.*

The government of this country, in respect to taxes, is the mildest herhaps in Europe; but it loses much of its merit by many prohibitions and restrictions,

* *Memorie della Soc. Agraria*, vol. iv. p. 3.

† *Trattato della Pratica di Geometria Perini*, 4to, Verona, 1751.

‡ *De la Lande's Voyage en Italie*, tom. vii. p. 81.

|| On this point, see Mr. Professor Symonds's excellent paper in the *Annals of Agriculture*.

which have taken place more or less throughout Italy. Silk cannot be sold in the country; it must all be brought to the city. All wood, within eight miles of the same place, is a similar monopoly; it can be carried no where else. The export of corn is always prohibited; and the regulation strictly adhered to; and, it may be remarked, that the price is never low; the natural, and probably the universal effect of such a policy, must be a high price, instead of that low one, which is the object of the State.

TUSCANY.

In the States I have hitherto mentioned, to name prohibitions, is to exemplify their mischief in the conduct of all the governments, through whose territories I have yet passed; but in Tuscany the task is more agreeable—to give an account of prohibitions there, is to shew the benefit of their reversal, and of that system of freedom, which the late beneficent sovereign introduced.

In 1775, an unlimited freedom in the export and import of corn was established. The effect of this freedom, in the commerce of corn, has been very great; in the first place, the price of corn has risen considerably; and has never for a moment been low; the rise has been steady; famines and any great scarcity have been absolutely avoided, but the augmentation of price on an average has been great. I was assured, on very respectable authority, that landlords, upon a medium of the territory, have doubled their incomes, which is a prodigious increase. This vast effect has not flowed immediately from the rise in the price of corn, but partly from an increased cultivation, in consequence of that price, and which would never have taken place without it. On the other hand, the consumers feel a very great rise in the price of every article of their consumption; and many of them have complained of this as a most mischievous effect. I was assured, that these prices have been doubled. Such complaints can be just only with respect to idle consumers, at fixed incomes; a pension or an annuity is undoubtedly not so valuable now, as it was before the free corn trade; this is clear; but it is equally certain, that landlords, and all the mercantile and industrious classes, profit greatly by the general rise: this fact is admitted, nor would the improvement of all the arts of industry; the situation of the poor most highly ameliorated; and the increase of population, allow it to be questioned. Before the free trade, the average price was $5\frac{1}{2}$ *pauls* (each $5\frac{1}{2}$ d.) per *stajo*, of 54 lb.; now the average is 9 *pauls*. Here is a rise in the price of 40 per cent. Those whose interests, or whose theories point that way, will contend that this must be a most pernicious evil, and that the consumers of corn must suffer greatly; it however happens, and well it deserves to be noted, that every branch of industry, commercial and manufacturing, has flourished

more

more decidedly since that period, than in any preceding one, since the extinction of the Medici. This is one of the greatest political experiments that has been made in Europe; it is an answer to a thousand theories; and ought to meet with the most studious attention, from every legislator that would be thought enlightened.

No body can express himself better against the regulations in the corn trade, than Paoletti:—"Uno dei più gravi e dei più solenni attentati, che in questo genere si sia fatto, è che ancora, da una gran parte dei politici governi si fa all'ordine naturale è certamente quello, delle restrizioni e dei divieti nel commercio de'grani. Non han conosciuto mostro il più orribile, il più funeste quelle sfortunate nazioni che ne sono state infestate. Le pesti, le guerre, le stragi, le proscrizioni dovunque aprirono il teatro alle loro tragedie non arrecarono mai tanti danni al genere umano, quanto questa arbitraria politica *."

It is remarked, by a very intelligent writer, that the early declension of Tuscan agriculture, was caused by the ill-digested and injurious laws of restriction and prohibition, in the beginning of the sixteenth century: the price of provisions was regulated, in order to feed manufacturers cheaply, not perceiving that the earth gave scanty fruits to poor cultivators; that exalting the arts by the depression of agriculture, is preferring the shadow to the body. Wool was wanted for the fabrics, yet no encouragement given to breeding sheep. Merchants and manufacturers composing the legislative body, whose interests were concentrated in Florence; all the other towns, and generally the country, were sacrificed at the shrine of the capital: they made a monopoly of the Levant trade, and even of ship-building; which had such pernicious consequences, that in 1480, they were obliged to lay open the remnants of trades once flourishing †. They shewed the greatest eagerness to encourage the planting of mulberry-trees; yet knew so little of the means of doing it, that they subjected the sale of cocoons to a multitude of restrictive regulations, and even fixed the price, and gave a monopoly of the purchase ‡; and even the power of fixing the price of silk was, by the government, given to four dealers; and in 1698, the whole trade was subjected to the price of one man; and such was the effect of these fine measures, that a law was passed forcing plantations of mulberries; four trees to every pair of oxen employed §. So utterly subversive of the intention will the prohibitory system always prove!

By the edicts of 1775, 1779, and 1780, of the Grand Duke, a multitude of restrictions, on the sale of cocoons and wool, and on the fabric of both silks

* *Iveri Mezzi, &c. Ap. Apol.* 1772, 8vo, p. 19.

† *Ragionamento Sopra Toscana*, p. 68.

‡ Cosmo I. first allowed the export of cocoons, February 22, 1545; subject to a duty of 18*s.* the pound, of one fort, and 3*s.* the other; augmented successively, and at last fixed to 2 liv.

§ *Ragionamento*, p. 83.

and woollens, were abolished. A free trade in corn, oil, cattle, and wool, was given* about the same time; as well as the rights of commonage destroyed †. By the edict of March 18, 1789, the plantation and manufacture of tobacco was made free; and, that the farmers of the revenue might not be injured, the benevolent sovereign declares he will buy all cultivated on the usual terms, till the expiration of the farmer's lease ‡.

I am very sorry to add to the recital of such an enlightened system, a conduct in other respects borrowed entirely from the *old school*: the export of cocoons has been long prohibited; and even that of spun silk is not allowed. But what is much worse than this, the export of wool, about six months ago, was forbidden, under the shallow pretence of encouraging manufactures. Such a monopoly, against the agriculture and improvement of the country, is directly contrary to the general spirit of the Grand Duke's laws. The same arguments which plead in its favour, would prove equally in favour of prohibitions, and shackles on the corn trade; he has broken many monopolies: Why give a new one? The most plausible plea for this, is the example of England; but does he know that of all the fabrics of that kingdom, this of wool is the least flourishing; and precisely by reason of the manufacturers having the monopoly of the raw material, and thereby being enabled to sink the price 60, and even to 70 per cent. below the common rates of Europe? The total failure of this policy in England, which cheats the land of four millions a year, in order not to increase, but to hurt the fabric, should plead powerfully against so pernicious an example. They should know, that the raw materials of our most flourishing fabrics, are exportable; some free, and others under low duties; and that wool is an exception to all the rest; and at the same time, the manufacture that has made the least progress ||.

MODENA.

The export of wool is prohibited; wherever this is the case, it is not to be expected that any exertions can be made in improving the quality; and accordingly we find that all the Modenese is miserably bad. The measure is intended as a gratification to the manufacture; and when that possesses the mo-

* *Leggi dei*, Sep. 14, 1774; Dec. 28. Also, Aug. 24, and Dec. 11, 1775.

† March 7, and Apr. 11, 1778.

‡ *Della Coltivazione del Tabacco*. Lasfri. Firenze, 8vo, 1789, p. 40.

|| See this point particularly explained in *Annals of Agriculture*, vol. x. p. 235, and in many other papers of that work. Some of these memoirs were translated and published in French, under the title of *Filature, commerce et prix des Laines en Angleterre*, 8vo, 1790; but some of the best papers, for instance, that above alluded to, and others, were left out of the collection.

nopoly, the wool is sure to be worthless; which is the case here. They make in the mountains, some coarse things for the wear of the common people.

PARMA.

There is a fabric of earthen-ware at the city of Parma, to encourage which, the import of all foreign ware is prohibited; the effect is, that the manufacture is contemptible, without an effort of improvement; it has the monopoly of the home consumption, which yields a great profit, and further nobody looks. It was justly observed to me, that with such a favour no flourishing manufacture could ever arise at Parma, as the advantage of the monopoly was greater. The policy of prohibitions has every where the same result.

SECT. VII.—OF THE PRICES OF PROVISIONS, 1789.

Nice.

Bread, 3*f.* (the Piedmontese *sol* is the twentieth part of a livre, or a shilling, and the pound is about one-tenth heavier than the English). Beef, 3*f.* 8 *den.* Mutton, 4*f.* Veal, 5*f.* Butter, 12*f.* Cheese, 11*f.* Bread, last winter, 1 *piccolin* (one-sixth of a *sol*) cheaper. At these prices of meat, weighing-meat added.

Coni.

Bread, 2*f.* 3 *den.*; for the poor, 1½*f.* Beef, 3*f.* 2 *den.*

Turin.

Bread, 3*f.* Veal, 5*f.* Butter, 9*f.* Cheese, 9*f.* Brown bread, 2½*f.*; for the poor, 1*f.* 8 *den.* Nobody but the poor eats beef or mutton.

Milan.

Beef, 13*f.* Cow ditto, 10*f.* (the *sol* the twentieth of the livre, which is 7½*d.*; the pound *grossò* is to that of England, by Paucton, as 1.559 is to 0.9264). Mutton, 10½*f.* Veal, 15*f.* Pork, 18*f.* Butter, 35*f.* Cheese, Lodizan, 42*f.*

Codogno.

Bread, 4 oz. 1*f.* Beef, 12*f.* per lb. Veal, 12*f.* Butter, 22*f.*

Verona.

Bread, 5 *f.* per lb. of 12 oz. (equal to ¼ lb. English). 20 Venetian *sol*s equal to 6*d.* English.

Vicenza.

Vicenza.

Beef, 14*s.* per lb. of 12 oz. *grosso*; this ounce is to the English, as 690 is to 480. Mutton, 13*s.* Veal, 16*s.* Pork, 17*s.* Butter, 30*s.* Cheese, 32*s.*; ditto of Lodi, 44*s.* Hams, 44*s.* Bread, by the ounce *setile* (which is to the *grosso*, as 1 is to $1\frac{1}{2}$), 6*s.*

Padua.

Beef, 14*s.* per lb. of 12 oz. *grosso* (which is to the English pound, as 9966 is to 9264. Paucton). Mutton, 12*s.* Veal, 16*s.* Pork, 16*s.* Butter, 32*s.* Cheese, 24*s.*

Venice.

Beef, 15*s.* per lb. *grosso* (to that of English, as 9758 is to 9264. Paucton). Mutton, 13*s.* Veal and pork, 18*s.*

Ferrara.

Beef, $3\frac{1}{2}$ *baiocchi* (10 to a *paul* of 6d.) per lb. of 12 oz. Mutton, 3 *baioc.* Veal, 4 *baioc.* Butter, 9 *baioc.* Cheese, 8 *baioc.*

Bologna.

Bread, 2 *baiocchi* per lb. (to the pound English, as 7360 is to 9264. Paucton). Beef, 4 *baioc.* 2 *quatrini*. Mutton, 3 *baioc.* 4 *quat.* Veal, 5 *baioc.* 2 *quat.* Pork, 6 *baioc.* Butter, 10 *baioc.*; and in winter, from 15 *baioc.* to 20 *baioc.*

Florence.

The livre (of $8\frac{1}{2}$ d.) is 12 *grazie*, or 20 *soldi*, the *sol* is 3 *quatrini*; and the pound is three-quarters English. Bread, 8 *quatrini* per lb. Meat in general, 7*s.* Butter, $1\frac{1}{2}$ *paul* (the *paul* $5\frac{1}{2}$ d. English). Cheese, 10*s.*

MODENA.

Bread, the best white, $\frac{1}{4}$ *paul* per lb. (the *paul* is 6d. English; and the pound is to ours, as 6513 is to 9264, or something under twelve of our ounces). For the poor it is cheaper. Bread is thus dear, owing to the *entrées* and *gabelle*; a sack of flour, of 70 liv. sells at 100 liv. Beef, 12 *bolognini* per lb. Mutton, $\frac{2}{3}$ of a *paul*, or 10 *bol.* Veal, 13 *bol.* Pork, 14 *bol.* Butter, 1 *paul*. Cheese, 40 *bol.*

Laneſbourg.

Bread, 4*s.* for 18 oz. Meat of all sorts, from 3*s.* to $3\frac{1}{2}$ *s.* for 12 oz. Cheese, from 4*s.* to $5\frac{1}{2}$ *s.* Butter, 6*s.* for 12 oz.

CORN,

CORN, 1789.

PIEDMONT.—*Coni.*

Rye, the *eymena* of 2 *rubbio*, or 50 lb. 3 liv.

Chentale.

Wheat, the *eymena* of 45 lb. or 52 lb. aver. 47, 3 liv. 15*f.* In common, 3 liv. 15*f.* Maiz, 2 liv.

Turin.

Maiz, 2 liv. Wheat, 3 liv. 10*f.* the *eymena* of 50 lb. Rye, 2 liv. 10*f.*

Milan.

Wheat, 34 liv. the *moggio* of 140 lb. 28 oz. Oats, 15 liv. Maiz, 20 liv. Miglio, 18 liv. Rice, 44 liv.

Codogno.

Rice, 5 liv. the *stara*. Willow wood, 14 liv. 6 *braccio* long and 3 *braccio* broad. Flax, 5½*f.* for 5 oz. ready for combing; 50*f.* per lb.

Verona.

Wheat, the export prohibited when it exceeds 24 liv. the sack, (26s. 6d. English quarter). Maiz, now 24 liv. the sack, of 11 *pesi*, of 25 lb.; common price, from 20 liv. to 22 liv.; has been so low as 6 liv.

Venice.

Wheat flour, 8½*f.* per lb. Bergamasque maiz, 24*f.* the *quarterole*, of 6 lb. Common maiz, 22*f.*

Bologna.

Wheat, the *corba*, 24 *pauls*. Maiz, 18 *pauls*. Oats, 12 *pauls*. Barley, 16 *pauls*. Beans, 18 *pauls*.

Florence.

Wheat, 9 *pauls* the *stajo*, which may in a rough way be called 1d. per lb.: this is 4s. 9d. per English bushel, of 57 lb.; and 5s. per bushel, of good wheat. Before the free corn trade, it was on an average, at 5½ *pauls*. Beans, now 5½ *pauls* to 7 *pauls*. Saggina (great millet), 4 *pauls* the *stajo*. Maiz, from 4 *pauls* to 5 *pauls*. Barley, 5 *pauls*. Oats, 4 *pauls*. French beans, 7 *pauls*.

WINE,

WINE, FUEL, HAY, STRAW, &c.

Nice.

Wine, 7*f.* the bottle. Charcoal, 24*f.* per 100 lb. Wood, 15*f.* per 100 lb.

Cbentale.

Hay, from 5*f.* to 8*f.* the *rubbio*, of 25 lb.

Turin.

Hay, 10*f.* the *rubbio*. Straw, the same. Wine of Brenta, 7 liv. 10*f.* the 36 pints, each 4 lb.; for the poor, 4 liv. Wood, 12 liv. the load, of 200 pieces, 3 feet long. Charcoal, 12½*f.* the *rubbio*. Candles, from 9*f.* to 10*f.* Soap, 7*f.* Lime, 5½*f.* the *rubbio*. Bricks, 22 liv. per thousand.

Milan.

Iron, the pound of 12 oz. 5*f.* Charcoal, 100 lb. of 28 oz. 3 liv. Bricks, 30 liv. per thousand.

Mozzata.

Wine, common price, 10 liv. or 12 liv. the *brenta*, now 6 liv.

Milan.

Hemp, ready for spinning, 1 liv. per lb. of 28 oz. Flax, ditto, 32½*f.* Oil, linseed, per lb. of 28 oz. 26*f.* Walnuts, 1 liv.

Verona.

Wood, 5*f.* the *peso*, of 25 lb. (18 lb. English).

Vicenza.

Candles, 20½*f.* Soap, 20*f.* Dutch herrings, 3*f.* each. Iron, 11*f.* *grossò*. Charcoal, from 5 liv. to 8 liv. the 100 lb. Coals, from Venice, 4½ liv. the 100 lb. Wood, the *carro*, of 108 cubical feet, 22 liv.; of oppio, walnut, &c. the pieces the size of a man's arm. Sugar, from 25*f.* to 35*f.* *lotile*. Coffee, 3 liv. 6*f.* Chocolate, 3½ liv. or 4 liv.; with vanilla, 6 liv. or 7 liv. By the ounce *grossò*, which is to the ounce English, as 690 is to 480, is weighed flesh, butter, cheese, candle, soap, &c. By the ounce *lotile*, is weighed sugar, coffee, drugs, rice, bread, silk, &c.; it is as 1 is to 1½.

Ferara.

Wine, 1 *baiocca* the *bocali*.

Bologna.

Bologna.

Wood, the load, 30 *pauls*. Faggots, 24 *liv.* per 200. No coal. Charcoal, 1½ *paul* the *corba*. Bottle of common wine, from 3 *baioc.* to 5 *baioc.*: common price of wine, from 20 *pauls* to 30 *pauls* the *corba*, of 60 *bocali*. Sugar, 2 *pauls* 1 *baioc.* the lb. Coffee, 2 *pauls* 2 *baioc.* Of Moka, 3 *pauls* 5 *baioc.* Candles, 8 *baioc.* Wax ditto, 8 *pauls*. A footman, with a livery, 50 *pauls* a month. A man cook, from 20 to 40 *zecchins*. An English gentleman's table is served, nine in the parlour, and five in the kitchen, by contract, for 20 *pauls* a day.

Florence.

To plough a *stiora* of land, 3 *liv.* Hay, 4 *pauls* the 100 lb. (about 2l. 15s. a ton). Straw, 3 *pauls* per 100 lb. Wine, 8 *grazie* the bottle. Charcoal, 100 lb. 4 *pauls*. Wood, the *cataster* of 6 *braccia* long, 1½ broad, and 2 high, 28 *liv.* Rent of a poor man's house, 18 *pauls*.

MODENA.

Wood, 45 *liv.* the load, of 3 *braccia* long, 3 high, and 3 broad. Wine, 40 *liv.* the 12 *pesi*. Candles, 20 *bol.* Soap, 15 *bol.*

PARMA.

Hay, 80 *pesi*, 150 *liv.* (the *pesi* 25 lb. each ¼ lb. English; and the *livre* 2½ d. about 1l. 9s. per ton);

LABOUR.

Nice.

Summer, 30*f.* (1s. 6d.) Carpenter and mason, 40*f.* (2s.)

Coni.

Summer, 14*f.* Winter, 10*f.* (6d.) Mason, 25*f.*

Savigliano.

Summer 12*f.* Winter, 10*f.* Farm servants wages, about 100 *liv.* (5l.) a year, beside their food, which consists of 3 lb. or 4 lb. of bread, according to the season, a soup maigre, a *polenta* (a maize pudding), &c. &c. During the summer, they add cheese, and a little small wine, with a salad; and in harvest time, a soup of good wine, which they call *merendon*, but they then work twelve hours a day.

Turin.

Summer, 11*f.* Mason, 25*f.* Carpenter, 27*f.*

Milan to Pavia.

Summer, 22½*f.* (8*d.*) Winter, 10*f.* (3½*d.*) Manufacturers, 40*f.* Labourers pay 7 liv. (at 7*d.* English) for a cottage, and a very little garden.

Mozzata.

Summer, 12*f.* Winter, 10*f.*

Lodi.

Summer, 20*f.* Winter, 12*f.* Harvest, 30*f.* Mowing, 20*f.* a day; a good hand mows 5 *pertiche* a day.

Codogno.

Weavers, 20*f.*

Verona.

Summer, 30*f.* (9*d.*) Winter, 20*f.* (6*d.*)

Vicenza.

Summer, 16*f.* Winter, 14*f.* Mowing, 30*f.*

Padoua.

Summer, 25*f.* and wine. Mowing, 2 liv. (1*s.*) a day: wheat, 3 liv. ditto. Winter, 16*f.*

Venice.

Summer, from 30*f.* to 40*f.* Mason, 4 liv.: the lowest in the arsenal, 3 liv. a day.

Ferrara.

Summer, 25 *baiocchi* (1*s.* 3*d.*) Winter, 12 *baioc.*

Bologna.

Summer, 12 *baioc.* and 2 *bocali* of wine, each 3 lb. 4 oz. Winter, 10 *baioc.* (6*d.*) In harvest, to 20 *baioc.* Half a day, of 4 oxen and 2 men, 5 *paoli* (2*s.* 6*d.*) Manufacturers earn from 5 to 20 *baioc.* a day. The women that spin hemp, 3 or 4 *baioc.*

Florence.

In the silk mills of Florence, they are now (November) working by hand, for want of water. The men earn 3 *pauls* (1*s.* 4½*d.*) A girl or fifteen, 1 *paul* (5½*d.*) In the porcelaine fabrics of the Marchese Ginori, common labour,

LOMBARDY.

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2 or 3 *pauls*. Painters, $4\frac{1}{2}$ *pauls*. In summer, $1\frac{1}{2}$ *paul* and food. In winter, 1 *paul* and ditto. To plough a *stiora* of land, 3 liv. Threshing corn by the day, 1 liv. and food. Cutting corn, 18 *grazie* and food.

MODENA.

Common labour, 1 *paul* and wine. Carpenter and mason, 2 *pauls*.

PARMA.

Printer's men, 3 *pauls* a day, (16½d.)

Laneſbourg.

Winter, 10*s*. and food. Summer, 20*s*. and food.

POULTRY.

Nice.

Turkey, 7 liv. Fowl, 20*s*. Pigeon, 20*s*. Eggs, 12*s*. the dozen.

Turin.

Turkey, 30*s*. Fowl, 15*s*. Duck, 25*s*. Goose, 25*s*. Pigeon, 10*s*. Eggs, the dozen, 8*s*.

Milan.

Turkey, 11*s*. per lb. Fowl, 20*s*. Duck, 32*s*. Eggs, the dozen, 26*s*. Capon, 15*s*. per lb.

Bologna.

Turkey, of about 4 lb. $3\frac{1}{2}$ *pauls*. Pair of capons, 30 *baiocchi*. Eggs, 1 *baioc*. each; in winter, $1\frac{1}{2}$ *baioc*. Tame large pigeons, 24 *baioc*. the pair. Wild small pigeons, 12 *baioc*. Eels, from 12 to 14 *baioc*. per lb. Tench, 10 *baioc*. per lb. Pike, from 12 to 15 *baioc*. Sturgeon, 5 or 6 *pauls* per lb.

MODENA.

Capon, 1 *paul*. Fowl, 40 *bol*. Turkey, 4 liv. Duck, 4 liv. Twenty eggs, 25 *bol*. Pigeons, 1 *paul* the pair.

RISE OF PRICES.

Milan.

In 794, a decree of the Senate and Diet of Frankfort, canon 4, that corn should sell at the following prices, no regard to scarcity and abundance:— *Moggio* of oats, 1 *denaro*; one of barley, 2 *denari*; one of rye, 3 *denari*; one of wheat, 4 *denari*: proportion 1080 to 1.

In 835, hogs, 20 *denari*.

In 857, one pound of silver, *lira*, 20 *soldi* of 12 *denari*; one *denaro*, now at Milan, on comparison of an antient *denaro*, of half a *paolo*, was as 1 to 90; for 90 *denari* make half a *paolo*. The value of silver now, to that of antient times, as 1 to 12; therefore it is 1 to 1080*.

In 975, *un stajo di vino*, 1 *denajo*; *un moggio di frumento*, 4 *denaji*; *un carro di legna*, 1 *denajo*, equal to 18 liv. at 1 to 1080†.

In 1152, rye and panic, 3 liv. the *moggio*; 1 *denaro* equal to 130; consequently 3 liv. is equal to 13 liv. 10s. 10 den.‡

In 1165, 500 hogs, each 6 *soldi*; which now we must call 65 liv. each||. Cart load of wood, drawn by a pair of oxen, 12 *denari*; equal now to 6½ liv.

In 1272, 1 *moggio* of wheat, the common price, 19 *soldi*. Millet, 12 *soldi*; and this, to the money of the present time, is as a livre for a *sol*; that is, wheat, 19 liv. and millet, 12 liv.§

In 1315, 1 *soldo* for a mafs, equal to 20 now; 1 *fiorino d'oro*, 30s. now 60 liv. as 1 to 40: the *fiorino d'oro* antient, and the present *zecchino*, the same thing. From this time to the present, the proportion of the money of those times to the present, is as 1 to 4**.

In 1402, the *fiorino o ducato d'oro*, worth 42 *soldi*, equal to 16 liv. 8s. at present††.

Bologna.

The prices of every thing are now, at Bologna, from 10 to 15 per cent. dearer than ten years ago; here attributed to the increased plenty of money, from a rise of the price of the products of the country, hemp and silk selling much higher. Twenty years ago, hemp was at 30 *pauls*, now at 50. And in Tuscany, the prices of every thing doubled since the free corn trade.

* *Giulini, Storia di Milano*, vol. i. p. 268. † *Ib.* vol. ii. p. 380. ‡ *Ib.* vol. v. p. 527.

|| *Ib.* vol. vi. p. 332. § *Ib.* vol. viii. p. 254. ** *Ib.* vol. x. p. 87. †† *Ib.* vol. xii. p. 63.

It is worthy of the reader's observation, that the general prices of provisions, and of *living*, as it may properly be called, have risen, perhaps, as much in Italy, as in any country of Europe; certainly more than in England, as I could shew by many details, if they were consistent with the brevity of a traveller. A fact of so much importance, would admit of many reflections; but I shall observe only, that this sign of national prosperity, (and I believe it to be one), is not at all confined to the countries in the possession of extensive manufactures, and a great trade, since we find it in those that have none.

I shall not enlarge upon it, but barely hint, that the possessor of a landed estate in Lombardy, has raised his rents, to the full, as much in the last ten, twenty, thirty, or forty years, as his brother landlord has in England, who has blessed himself with the notion, that manufactures and commerce have done more for him, than for any other similar class in Europe. It is very common in the English parliament, to hear the deputies of our tradesmen expatiate on what the immense manufactures and commerce of England have done for the landed interest. One fact is worth an hundred assertions: go to the countries that possess neither fabrics nor commerce, and you will find as GREAT a rise perhaps in the same period.

S P A I N.

M T A 9 2

S P A I N.

CULTIVATION, &c.

THE vale of Aran* is richly cultivated, and without any fallows. Follow the Garronne, which is already a fine river, but very rapid: on it they float many trees to their saw-mills, to cut into boards; we saw several at work. The vale is narrow, but the hills to the left are cultivated high up. No fallows. They have little wheat, but a great deal of rye; and much better barley than in the French mountains. Instead of fallows, they have maiz and millet; and many more potatoes than in the French mountains. Haricots (French beans) also, and a little hemp. Saw two fields of vetches and square peas. The small potatoes they give to their pigs, which do very well on them; and the leaves to their cows; but assert, that they refuse the roots. Buck-wheat also takes the place of fallow, many crops of it were good, and some as fine as possible.

The whole valley of Aran is highly peopled; it is eight hours long, or about forty miles English, and has in it thirty-two villages. Every one cultivates his own land. A journal of meadow sells in the valley for 800 liv. irrigated, but by no means so well as in the French mountains, nearly an arpent of Paris, which is something more than an English acre. The lower arable lands are sold for 500 liv. or 600 liv.; the sides of the hills proportionably; and the higher lands not more than 100 liv. Their crops of all sorts, vary from 2½ to 3 quarters English the acre. Hay harvest no where begun.

* The route in which these observations were made, is marked in the journal inserted in the first volume; also the dates.

The mountains belong, as in the French Pyrenees, to the parishes; each inhabitant has a right to cut what wood he pleases for fuel and repairs, in the woods assigned for that purpose; others are let by lease at public auction, for the benefit of the parish, the trees to be cut, being marked; and, in general, the police of their woods is better than on the French side; when woods are cut, they are preserved for the next growth.

Have scarce any oxen; what few they kill, they salt for winter. Taxes are light; the whole which a considerable town is assessed at being only 2700 liv. which they pay by the rent of their woods and pastures let: but if calculated by *tailles*, houses, &c. and including every thing, the amount would be about 3 liv. a year, on a journal of 600 liv. value. This is the proportion of an acre of land worth 30l. paying 3s. a year, in lieu of land and all other taxes.

Coming out of Veille, see to the right some of the most stoney land I have ever beheld, yet good hemp and buck-wheat were growing on it. In the hedges, many of the plants common to them in England. The pastures on the mountains good, quite to the snow; but the low meadows not watered with the attention given them by the French in their Pyrenees. Pass several of the thirty-two villages of the valley of Aran; population very great, for they crowd on each other; and this results here from the division of property, and not from manufactures, which have more than once been supposed the only origin of great population.

Much *millefolium* here, and other plants common with us. Plough with bullocks; all we saw, pale reddish, or cream-coloured, and with horns.

No wood at the top, but pasturage and rocks of micaceous schistus; met a great herd of dry cows and oxen, cream-coloured. It is remarkable, that a pale reddish cream-colour holds from Calais quite across France hither, with very little variation.

Flocks of sheep, and a penn for oxen and cows—the latter milked for cheese. Plough with oxen in yokes and bows, as in England, and not yoked by the horns as in the south of France. Come to fallows (which is a point of worse husbandry than we have seen for some time), manuring by asses, loaded with baskets. The trees here (pines) are finer than on the French side; they are all cut for the Tolouse market, being carried over the mountains, and floated down the Garonne; from whence we may draw conclusions on the comparative demand of the two kingdoms. Land here sells from 400 liv. to 500 liv. the journal.

Come

Come to the valley d'Efteredano, where wheat and rye are cut. Every scrap on the descent is cultivated; an extensive savage view of mountain, with patches of culture scattered about the declivities: but fallows are found here.

Pafs Rudafe, on the top of a rocky mountain, come presently to vines, figs, and fruit trees; snow in sight. As we descend to the vale, every spot is cultivated that is capable of being so.

Cross the river to Realp; about which place is much cultivation, as the mountains slope more gently than hitherto. Hedges of pomegranates in blossom. The town is long and has many shops. Hemp is the great object in it; of this, they make ropes, twine of all sorts, bags, and have some looms for converting it into cloth. Corn and hay all carried on panniers.

Pafs Sort, a vale spoiled by the river, which exhibited the depredations of the Italian rivers, so excellently described by my learned friend, Mr. Prof. Symonds.

Hitherto, in Catalonia, we have seen nothing to confirm the character that has been given of it; scarcely any thing has a tolerable appearance. It is much to be questioned, from the intelligence, whether they have any such a thing as a farmer who rents land: only patches of property—no maiz, and French beans very poor—fallow every where on the hills, and yet the rye after them miserable. Old vineyards, of late, quite neglected, over-run with weeds, yet the grapes of a size that shew what the climate is; they are now as big as pease. In the towns every thing as bad; all poor and miserable.

Rising up the mountain, which is all of pudding stone, we find it is all cut into terraces, supported by many walls, with rows of vines on them for raisins, not wine, mulberries, and olives: but here are fallows, and I thought I perceived traces of these hills having been formerly more cultivated than at present.

Pafs Colagase. Come to a regular vineyard, the rows twelve feet asunder, the intervals alternate fallow and corn. The features of the country now begin to relax, the mountains are not so high, and the vales are wider. The leaves of a good mulberry-tree sell for 44s. or 22d. English.

Many walnut-trees full of fruit. Much is tithed by the church: see much corn threshing every where.

Cross two pieces that had rye last year, left now to weeds, and will be under rye again next year; an extraordinary course. Mulberry-leaves never sold, but if so, the price would be about 4½ liv. a tree. Cows all red. Land in the vale sells from 20l. to 25l. English, the journal. The road leads up Monte Schia,

the whole of which consists of a white stone, and argillaceous marl. Snow on the distant mountains.

Look back over a great prospect, but totally to the eye without wood. Cross a hill to another great vale, where is much, and some rich cultivation, as the hills are not steep, but sloping.

Pass in sight of St. Roma, near it the road leads by a small round lake, but it is on very high ground, no hills near it; it is said to be very deep. Here they were hoeing a barley stubble, just ploughed, to form ridges, on which they sow French beans. This district is called that of shells: millet just up; pass a large waste almost entirely covered with lavender; corn on a part of it; but after a crop, they leave it to weeds to recover again. Here also they practise the alternate husbandry of one bed, or broad-ridge, corn, and another fallow. Plough with cream-coloured oxen. In breaking up the wastes here, they cut the spontaneous growth to dry, then pile it into heaps with the earth pared and placed on it; this is all burned; we saw heaps ready to be burned to the quantity of five hundred loads an acre: but the crops are wretched for many miles, scarcely the seed again.

In our inquiries, meet with some traces of what, in France, are called *Me-tayers*, that is, a sort of farmers who cultivate the land for half the produce; the landlord taking one half, and the tenant the other.

For two hours and a half, pass a waste mountain covered with shrubs, and scattered with ever-green oaks, and lower down, the evident remains of old terraces, which have once been cultivated, but now over-run with weeds. To Fulca; the ploughs here have all long beams, as in the south of France, which reach to the yokes of the oxen, and consequently they have no traices; two small sticks form the mould-board; they plough all flat.

In this district, not one acre in an hundred cultivated, all rocks, shrubs, and weeds, with patches of wretched oats on the mountain sides. The road leads up one which is all of stone, covered with rosemary, box, brambles, &c. As the top break at once on the view of a deep vale, or rather glen, at the bottom of which, a muddy river has spoiled the little land which might have been cultivated. The hills are steep, and all is cultivated there that could be so, but the quantity very small.

Descend into a very rich vale, and to the town of Paous. There we saw many persons winding silk, the cocoons were in warm water, and wound off by a well-contrived reel, something different from those used in France.

Prices

Prices.

Bread, 3*s.* per lb. of 12 oz.

Mutton, 6*s.* per lb. of 48 oz.

Pork, 15*s.* per lb. of 48 oz.

Bottle of sweet white wine, 5*s.*

Bottle of sweet red wine, 2*s.*

Here they were threshing, by driving mules around on a circular floor of earth, in the open air; a girl drove three mules round, and four men attended for turning, moving away the straw, and supplying the floor with corn. Their crops are all brought home by mules or asses with panniers; met several; they each carried six sheaves, equal to twenty common English ones; where roads are bad, this is the only way in which it can be done.

Pass a great waste of argillaceous marl, in which are strata of talc:—much of it a soft white rock; the strata in some places clear and transparent, shining, break in thin flakes; the country for many miles waste, so that there are not more, I guess, than one acre in two hundred cultivated.

More deserts for several miles. Some alternate fallow husbandry between vines, and the crops so contemptible, that they produce not more than the seed. Pass some vineyards surrounded on every side by deserts; no water, and yet the vines and grapes are of the most beautiful luxuriance; from which I conclude, that immense tracts of these waste lands, might be applied with equal profit, if there were men and capitals enough in the country.

Meet a farmer, who pointed out to us a piece of land, containing exactly a Catalonia journal, from which, it appeared to be pretty nearly the same measure as an English acre. They stack their corn by the threshing floor, drive mules, &c. around upon it, and draw the straw, when cleared, with ropes, by a mule to the stack, in which it is deposited for winter use.

To Beosca, mostly desert hills, but some broad vales, which are cultivated; about that place, many mulberries, vines, and corn, but all the last gained by fallow. A farmer here, pays a seigneur, who lives at Barcelona, 2000 liv. a year for his farm, which is reckoned a large one. Through all this country, they collect from every waste spot, amongst their cultivated lands, shrubby wood and weeds, with which they burn heaps of clods and earth, and spread the ashes on the fallow as a manure for corn.

There seems every where to be inclosures sufficient for ascertaining distinct properties, but not for security against any sort of cattle. No where any wood

to be seen, except fruit trees, olives, or ever-green oaks, which are almost as sad as the olive; altogether, nothing for beauty of landscape. The hills all rocks, and the vales vines, scattered with those trees. Some new plantations of vines. Towards Toorà, the country is much more cultivated; the sides of the hills covered with olives. The vale has many mulberries, and much tillage; and for some miles past, there are many scattered houses, which has not been any where the case before: remarked one great improvement, which was a vineyard, with vetches sown in the alternate husbandry between the rows, instead of a fallow, to be followed by corn.

Leave Calaff.—Crop and a fallow; some vetches; much cultivation; and better corn than we have in general met with; some sown in squares, as if in clusters, but could not learn the fact. In some parts, many vetches instead of fallow; they are planted by hand, and wheat sown after. The soil, a good adhesive loam, brown with a reddish hue, better than the white land, which travelled with us so long yesterday: most of the corn cut.

Great waste, and mount a hill, from whence an extensive view; all the country alike, no wood; and not one acre in ten cultivated. Pass four or five cream-coloured bullocks, and one or two blood-coloured. I note them, having seen so few in so many miles.

French beans, eighteen inches by twelve; a good deal of cultivation; but vast wastes, and country of a rocky, savage aspect; many pines, but poor ones. Within four hours of Montserrat, vines at six feet asunder, the first we have seen planted in that manner, which shews the proprietor content with having one product only on the ground.

Wastes continue; not one acre in a hundred cultivated. All broken country, and scarcely any vales of breadth.

At the bottom we came again to olives. Meet two very fine cream-coloured oxen, which the owner says would sell for about eighteen guineas; feeds them with straw, but gives oats or barley when they are worked; they are in such good order, that the straw must either be much more nourishing than ours, or their work very light indeed. From the marks in the pine-trees, conjecture that they draw resin from them.

Pass Orevoteau, where is a hedge of aloes about four feet high. A gradual descent, for some time, on a wretched stoney desert, of nothing but aromatic plants, thin, and scattered with the dismal ever-green oaks, more dull and disagreeable, if possible, than the olives.

Near

Near Esparagara, vines at five or six feet, which cover the ground; red loam, mixed with stones. This town is the first manufacturing one we have met with, or which seemed to be animated with any other industry than that of cultivation. The fabric is woollen cloths and stuffs. Spinners earn 6*s.* a day, and food. Carders, 11*s.* They have also many lace-makers, who earn 9*s.* a day. These are Spanish money; their *sol* is something higher than the French, which is our half-penny.

Fallow every where, yet many of the stubbles full of weeds. Corn yet in the field, and poor. Some vines promiscuous, at four feet; some in rows at six feet. Country disagreeable; many beds of torrents, without a drop of water, and shocking to the eye. Apricots, plumbs, melons, &c. ripe, sold in the streets, from the open ground. A pair of very fine cream-coloured oxen, 24*l.* English: the amazement is, how they can be kept in such order, in a country so arid and desert, and that has not a pound of hay in it.

The country now is far more populous and better built: many vines and great cultivation, but with fallows. The soil all a strong red loam; a way cut through a vineyard of this soil, which shewed it to be seven feet deep; at the bottom, was a crop of fine hemp; indeed, the soil to the eye, was as good at the bottom as on the surface.

They plough with mules abreast, without a driver, having a line for reins, as in England; the beam of the plough is long enough to reach to the circular iron, about nine inches under the yoke, to which the mules are collared. The yokes are like those in which oxen are worked, only with collars instead of bows. This method, which is very common in France also, has both its advantages and disadvantages; it will be a light draught, when the pitch of the beam is proportioned to the height of the mules, but if the share must be raised or lowered according to their height, it will be bad both for the land and the animals. To have the line of traction, from the draught to the body of the plough, is not quite correct, but it is much better than the common plough beams, made either too long, or too short: in this case, the length of the beams is ascertained: but the chief origin and intention of it, is cheapness. The mould-board of the plough here, has no iron on it, and is fixed to the left side; the share is double, as if to work with a mould-board on either side; this is a great fault; only one handle. It did its work tolerably. The wheat in sheaves is yet in the field, but the stubbles all ploughed, a narrow slip only left, on which the wheat remained: this shews good attention to the succession of crops.

Prices of Provisions, &c. at Barcelona.

Bread, 4*s.* and a fraction, per lb. of 12 oz.

Mutton, 22½*s.* per lb. of 36 oz.

Pork, 45*s.* per lb. of 12 oz.

That of the poor people, very little less; but they buy the soldier's bread, which comes cheaper; they live very much on stock-fish, &c.

Hams sometimes 3 or 4 *pesettos*, or shillings, per lb. of 12 oz. Wine, 4*s.* or 5*s.* the bottle.

Common day wages, are 25*s.* French; sometimes rise to 33*s.*; the very lowest, 22½*s.* Stocking weavers earn 33*s.*

Cream-coloured oxen in carts, their horns sawn off to the length of six inches, two yoked abreast, and one mule before. A pair of good oxen sell at 25*l.* English. Vale from a quarter to half a mile broad.

All the corn in the country, is left in the field till it is threshed, and they say it never takes hurt. A hill cut through, thirty feet deep, for the road, and walled on each side. The sea close to us on the right, all the way; and the vale I speak of, is between that and the hills: some of them are sandy, and planted with vines, which yield, per journal, four charges, the charge selling at 13 or 14 *pesettos*, and a journal for 300 Spanish livres; this is the journal, selling for 35*l.* 8*s.* 9*d.* and producing about 2*l.* 14*s.* very inadequate to the value of the land; there are great quantities of fruit-trees of all sorts.

At Gremata; after which, a vale for a mile and a half, or two miles, the soil sandy; and much cultivation. On the hills, many vines. Some corn without fallows; it is all cut, but not carried, and the land all ploughed.—Vines.

A wheat stubble ploughed up, and the land sown with buck-wheat, which is now up.

Part of a vale highly cultivated, but a great part waste, though on the same level to the eye, but much spoiled by a torrent, for a quarter of a mile broad; it is entirely ruined, yet there is no water now, nor any channel, all being level; in such cases as these, and indeed in most others, industry, united with good capitals, would remedy the evil. Eight men working a sandy field, by way of digging with an instrument very common here, a sort of hoe, sixteen inches long, and nine broad, with a handle so short, that the body is bent very much in using it. Vale two or three miles broad, and unites with an opening in the mountains. French beans often under maiz, but that crop much thinner,

thinner, and nothing gotten by it. Some very fine orange-trees, near twenty feet high, large stems, and thick round umbrageous heads. All this vale before Martore, is under a very fine cultivation. They have much lucern; and an article of attention, I had not before observed, was, tubs made on purpose for carrying the riddance of privies and urine to their fields.

Hemp yields ten quintals the journal. Vineyards give three, four, and five charges of wine per journal, and sell for 200 or 300 Spanish livres the journal: other lands, not irrigated, from 100 liv. to 150 liv. For above a league, vines on sand; very little other cultivation; the vale is two miles broad; sells at 150 liv. Spanish, the journal; on the hills, and near the sea, vines; mountains cultivated, imperfectly, almost to the top; but there is much waste. Houses scattered every where.

The cultivators are *metayers*, that is, they pay a portion of the crop instead of rent: the produce is divided into three parts; two for the farmer, and one for the landlord, in which case, the farmer is at every expence whatever. Some vineyards are let at from 15 to 40 *pesettos*; I have not met any where in France with vineyards let, for they are all in the hands of the proprietors. Land in general lets from 15 liv. to 35 liv.

Come to a great cultivated vale, but no water, or but little; maiz, six inches to two feet high, in squares, on land from which the corn has been cleared; the account we received. I suspect the highest to be previously sown in a bed, and transplanted as soon as the land was ready to receive it; millet also after corn; the soil a rich black loam.

Pafs Malgra. Vale two or three miles broad; vines and cultivation. A great deal of fine maiz, called, all over Catalonia, *Milicæ*. I found the same name for it afterwards in Languedoc, where they speak the same language as the Catalans. Lets for 15 liv. one with another. Maiz is sown, grain by grain, after corn; the soil a granite sand. A thick woodland, all inclosed. Pomegranates make very fine thick hedges. Much wood and vines—no watering nor fallows—houses scattered every where—soil sandy, but good. Very bad ploughing—cream-coloured oxen. Inclosures become still thicker. Poplars planted over some fields, and vines trained to them, and from one to another: reading accounts of this husbandry in books, I had formed an idea, that it must be singularly beautiful to see festoons of vines hanging from tree to tree, but there is nothing either pleasing or striking in it, and the wine is never good for want of sun, and owing to its being dripped on by another plant, which robs it also of its nourishment; corn is sown under them, which is damaged still more. Broad flat vale, formed of the ruins of granite.

Pafs for feveral miles in a vale, where the country has different features. It is all inclofed—much oak—a few vines, trained up trees. Soil bad. Two poor bits of meadow I noted, for they were the firft I had feen bad in Spain. Many fields over-run with fpontaneous rubbifh. Maiz and harricots cultivated here together, as in many other quarters. Some fcattered houfes. Much wafte on gentle hills that have vineyards on them, and would all yield that production, if planted. A floping hill of granite fand, well cultivated. Vines, trained to oak and poplars, with many fruit trees. The price of wheat here is 15 or 16 *pefettos*, for the $3\frac{1}{2}$ *quarterons*, weighing $5\frac{1}{2}$ quarters, and each quarter 26 lb.; this is 143 lb. of wheat, cofting $15\frac{1}{2}$ *pefettos*, which will be 50s. the Englifh quarter. Barley half the price.

Come to a great wafte, fpreading over many hills, for feveral miles; to northern eyes, a moft extraordinary fcene. It is a thicket of aromatic and beautiful flowering fhubs, with very little mixture of any that are common with us. Large fpreading myrtles, three or four feet high, and covered with their fweet-fcented flowers, jeffamines, bays, and other fhubs, with which we croud our fhubberies, are here worfe nuiſances than heath with us, for we ſaw neither ſheep nor goats. View after this, a large plain, bounded by mountains, and fcattered every where with houfes—a good deal of cultivated incloſure. But, on entering, find much wafte in this plain. Vines now form hedges, and furround the fields. Come now to cattle, of which we have hitherto feen very little; ſaw feveral ſmall flocks of ſheep, moſt of them entirely black, ſome without horns, others with, and curling round the ears. All the oxen cream-coloured; except two, with the necks and end of their tails black; all well made, and in fine order. Large breadth of corn, and ſome fields left apparently to grafs. I ſuſpect fallows.

The country ſtill thickly inclofed, ſome pieces of grafs, and a few of meadow, which are not burned, hot as the climate is. More cattle here than we have yet feen. They keep their ſheep and hogs (all black) together, and the girls, &c. who attend them, ſpin hemp.

Pafs Goronota; and many waſtes for ſome miles on gentle ſlopes; the ſoil good, but covered with aromatic fhubs; no cattle ſeen in any of them. Level vale with much culture, and much paſture: many large oaks on old double banks; alſo tall poplars: all inclofed, and like many parts of England, as maiz and vines are not here; a thick woodland. In this part, the ſoil is a deep, rich, brown, adhesive loam: the corn not carried, but the land ploughed and ſown with French beans. They have peaſe, beans, maiz, hemp, &c. without watering, and, that circumſtance conſidered, the crops are good. The
ploughs

ploughs are drawn by cream-coloured oxen, guided by a line, and without a driver. Some meadows without water; with many quails. They are *metayers*, paying the landlord one-third of the produce; but not of *phang*, which is for oxen; *phang* is their name for clover; and this the first time we met with any information about it. It puzzled us much to discover, what *phang* could be; but I found, by accident, a plant of *trifolium alpestre*, and shewing it to a farmer, found, by his description, that it was clover (*trifolium pratense*) beyond all doubt. They were now ploughing a wheat stubble, in order to sow it directly with *phang*. Their culture of it is singular, and very good; it is mown for hay once in the spring, yielding a fine crop; the land directly ploughed, and planted with *monget*, which is their name for fallow-hoeing crops, such as French beans, millet, pease, &c. This *monget* is kept very clean, and wheat sown after it, which is off soon enough for a second crop of French beans. A course with them is,

1. Maiz.
2. Wheat, and sown after with clover.
3. Clover and French beans.
4. Hemp and French beans.
5. Wheat and millet.

Vines are here planted in espaliers; small poles are laid on pegs driven into posts, which stand at six or eight feet asunder, and the vines trained to them; corn is sown between the rows; good land, yet waste join it. Many hedges are planted with the yellow-blossomed prickly acacia, which answers perfectly well for that purpose.

Within four miles of Gerona, husbandry continues good. Trees have vines trained to them. Much cattle, mules, horses, sheep, and hogs, kept in the stubbles: fine cream-coloured oxen in the ploughs. The soil, fine deep reddish loam. Now reaping a crop of square pease, three feet high, stout as lupines, with pods like that plant; all here, an inclosed woodland. Hemp, six feet high, and not watered. To the left of Gerona, mountain beyond mountain, branches of the Pyrenees, and very high; but seemingly a good deal of cultivation on them. Fine rich deep soil in the vale before Gerona; the same husbandry—crops of corn, very fine, not carried, though all the land quite green with young millet; this extreme confidence in the climate, shews clearly what it must be.

A journal of the vale land sells for 200 Spanish livres, or 23l. 12s. 6d. and lets at 8 liv. to 10 liv. that is, 11. 1s. English; but none of it is irrigated. They do not tithe either lambs or other live stock.

Price of Provisions at Gerona.

Bread, 3*s.* per lb. of 12 oz.; and excellent.

Beef, 10*s.*

Mutton, 6*s.*

Pork, 8*s.* per lb. of 16 oz.

Cheese, 20*s.* per lb. of 12 oz.

They have no mutton or beef, except what comes from France.

The poor live chiefly on vegetables, and a little pork: their labour, 20*s.* a day.

Leave Gerona.—Fine maiz, planted thin, with good cabbages under it: this is a system which promises well; but cabbages here, are only for the people, and not for cattle. Three measures and a half make a journal, and a pair of oxen plough three measures a day; buy their oxen in the French mountains, at a year old. Their hills are either wood, or cultivation, but mixed with part rocky waste. Cross some hills, which contain a great deal of waste, but see a broad valley to the right; all inclosed, and well cultivated; to the eye rich; houses scattered.

At Marenia, iron, 4*s.* or 5*s.* per lb. of 16 oz. The road up a hill; twenty or thirty women giving it a winding direction, by levelling earth; on inquiry, find it is done by the communities, and that they earn nothing; hence it is by *corvees*. Enter a wood of cork-trees; many of them barked half way up; the texture of this tree is remarkable, it seems formed of layers of bark, one under another.

The country now generally cultivated; the fields ploughed, but have had a crop. Some well-planted olives, ploughed under. All the corn we see is wheat; as to barley, it was cut and threshed the first week in June, and the land ploughed and sown with something else.

From Gerona to Calderoles, three hours and a half, generally cultivated; but wastes scattered, and mountains every where in sight. The course here, is,

1. Barley, left to weeds, &c. for cattle.
2. Wheat and millet, or French beans.
3. Oats or barley, and maiz for cattle.

No fallow, or *phang*; French beans are called *phafols*.

Leaving Calderoles, the country all cultivated; many olives, and under them vines; all well inclosed; no waste.

Pafs Baferà; a torrent has here destroyed a vale half a mile broad; pafs it by a ferry. Country now neither so rich, nor so well cultivated, as on the other side of that town. Maiz planted at six feet, and two rows; French beans in the intervals; olives scattered; but the maiz very poor under them. Country more poor and stoney, yet but few wastes. Olives and many tall pines. Wastes with pines; the sea two miles to the right, and the ridge of mountains in the front, seems to end abruptly at it. Many vineyards, and planted with olives; all under culture, and well inclosed with acacia hedges; several with ditches to them.

The vale of Figuera bounded finely by the mountains; many olives and vines, and a good deal of corn; but neither soil nor cultivation equal to what have passed; the former is more of a stone brash. Reach Figuera.

The 21st left Figuera, and breakfasted at Jonquieras. Enter the bottom of the mountains very soon; pafs through many olive grounds; the trees are large, and stand about sixteen feet asunder; soil good red loam, but stoney; no watering. A quart of oil, 2½ lb. of 12 oz. sells, retail, for a *pesetto*. Olives bear only every other year. Our guide says, he knows a tree, in Arragon, which yields from 50 lb. to 80 lb. for a crop. In these twelve miles to Jonquieras, vines scattered all the way on the hills; some few olives; many cork-trees, latterly: much cultivation, but a good deal of waste also. French beans in rows, and ploughed between with oxen. Soil all the way a granite sand.

The first leading feature of the minutes, is the immense quantity of mountains, and other wastes, which are found in every part of Catalonia. We travelled about three hundred and forty miles through the province, and may conclude, from what we saw, without any danger of being deceived, that not one acre in an hundred is under any sort of cultivation; in such gross calculation, one would take care to be within the truth, and if I said, not one in one hundred and fifty, I believe I should still be on the safe side of the assertion. When this fact is connected with the reputation which the province has, of being next to Valentia, the best cultivated, and, without exception, the most industrious in Spain, conclusions, very unfavourable to the state and policy of that monarchy, must necessarily be drawn by every reader. The advantage of possessing the second city of the kingdom, a place of great trade, and containing one hundred and twenty thousand souls, is very considerable, and must have done much, to bring the province even to its present situation. At the same time, that these boundless wastes were offending the eye, in every quarter, we could, in no part of Catalonia, condemn the people for want of industry; on the contrary, they seem very well to merit the character they have gained:

gained: the activity which is seen through all the towns upon the coast, and they are very numerous, and very populous, can hardly be greater, in a country submitted to numerous festival days, by its religion: the fishery in all those places is considerable, and attended to with an unabating spirit. The women and children make lace; and wherever the soil is good, or water conducted, cultivation is in a high state of perfection. Even in the interior country, we saw, every where, signs of much industry; and, amidst a poverty which hurt our feelings, we generally saw something to convince us, that it was not the fault of the poor people, that greater exertions were not made. Those interior parts depend entirely on their agriculture; and the height to which they climb the mountains, in order to find a spot tolerably level for cultivation, shews that their minds and bodies are ready for laborious exertions, whenever there is a prospect of enjoying the reward. With so much industry among the people, to what are we to attribute the waste state of their country? The inquiries necessary for a complete investigation of such a question, were not to be made by travellers: a longer residence would have been necessary; but a few circumstances should be mentioned, which are, probably, connected intimately with it.

First, the poverty of the people in the interior country is striking; their towns old, ill built, dirty, and wretched; the people ill dressed, and generally deficient in the wealth, best adapted to such a country, cattle: in the higher Pyrenees, this is not so much the case; they have cattle, and are in every respect in a better condition, owing to the plenty which great commons give in a country of good pasturage, and where wood is in profusion. The number of sheep we saw in general, was not the twentieth part of what the wastes, bad as they are for that animal, would maintain; and that of goats, so small, as to indicate the same thing strongly. This poverty, not being the effect of a want of industry, must result from a government inattentive to their interests, and, probably, oppressive; and from a total want of the higher classes residing amongst them. Till we came to the rich country, near Barcelona, that is to say, in about two hundred miles, we saw nothing that had the least resemblance to a gentleman's country seat; those who have estates let *in it are absent*; those we heard of, live at Barcelona; and the whole country is thus abandoned to the very lowest classes; and the wealth and intelligence, which might contribute to its improvement, diverted into distant and very different channels; this is a great misfortune to the people, and which will long contribute to keep things in their present state. To the same cause it is owing, that the roads, so essential in the improvement of a country, are left in a state which precludes the use of wheel carriages; which, with the unnavigable state of all the

the rivers, except for rafters of timber grossly put together, cuts off that system of reciprocal purchase and sale, that interior commerce, which is the best a country can possess. These are also evils, which the residence of men of fortune is the most likely to correct; and much above the power of peasants and mountaineers. With all these disadvantages, there are still circumstances which make it surprising, that more land is not cultivated. Vines and olives succeed very well on the poorest, and most arid soils; their growth and luxuriance, in spots surrounded on every side with wastes, and in soils not better, yield a conviction, which leaves no doubt, that the adjoining lands would, if planted, give a similar produce. The profit of doing it will not be suspected, if the revenue and value of cultivated lands, on comparison with the wastes, be considered. Two points here, force themselves on our notice; first, the want of capital for undertaking the work; and, secondly, the waste being in all probability in possession of absent landlords, who will not give sufficient encouragement to others to do what they neglect doing themselves.

Where cultivation climbs up the mountain sides, it is by small proprietors, who purchase of the communities of the parishes the property of the land; wherever the soil is in hands that will sell just the portion, which is in the power of a man to buy, great exertions are sure to be the consequence. There is no spur to industry so great, as the possession of a piece of land, which, in a country where the means of subsistence are contracted for want of more diffusive and more various employments, is the only comfortable dependence of a man, who wishes to be the father of a family. The parish that will sell a waste, at a moderate price, will be almost sure to see it cultivated; but the great lord, who rarely, or never, sells any of his property, unless ruin forces him to sell the whole, is equally sure of perpetuating the deserts, which are the disgrace of his country. He would let them, and perhaps upon advantageous terms; but it demands considerable capitals, and a very enlightened state of agriculture, for speculations of that sort to take place; the only capitals, which can be found in Catalonia, for such a purpose, are the hands of men willing to work; aided, perhaps, by some little savings, which have originated from the view of wastes that are to be purchased. All that has been done, and it is much in some districts, is to be traced clearly to its origin.

That these observations are just, will be confirmed by the prices of all the necessaries of life in that province; they have nothing very cheap; every article of consumption is somewhat dearer than in France; and it is more than once noted, that all the meat they eat comes from that kingdom. Their mules are bred in France, and great imports of cattle and sheep are common. This is a direct premium upon every species of rural industry, and its not
having

having operated greater improvements, must be owing to the causes on which I have touched.

To cultivate their wastes, to spread irrigation wherever it is possible to carry it, are the two first objects in Catalonian improvement; all others are inferior; they have, however, some which ought not to be neglected. Their wine and oil are objects of the greatest importance; for it is by these, probably, that all the lower wastes should be improved, which are not capable of irrigation; to improve the manufacture of these two articles, in such a manner as to increase the demand for them, would be one great means of accelerating the cultivation wanted; they are both bad; the wine is thick, muddy, and poisoned by the borachio; and the oil is generally rancid; both would otherwise be excellent; to remedy these defects, and force those commodities, by their merit, into commerce, would tend powerfully to enrich the province; and to enrich it in the very best method, by one, which would, at every step, accelerate its improvement. Wool is another commodity, which is of considerable value, and might be produced in an infinitely greater quantity than at present.

The reader will not expect from a traveller, who throws his ideas on paper amidst the movements of a journey, that correct attention which leaves nothing untouched; I attempt no more than to glance at some prominent features, and to delineate them roughly; to draw into one point of view, the conclusions which ought to be the object of all useful travels, it would be necessary to see much more, to reside longer, and to travel with greater advantages than I possess. This little journey has been very far from affording such materials, but it has not to me been barren; it has removed many false ideas from my mind, which the writings of men, who have either been inattentive to, or ignorant of agriculture, had placed there, relative to this province; and I know better how to appreciate the praises or condemnation, which are given of this or other countries, in similar climates.

There are many persons who travel, for enjoying the beauty of prospect;—and there are others, who seek for a residence better adapted than their own, to their health or their fortune; to such I will add a few words.—To the taste of a man that is fond of a country in a northern climate, there are few objects more pleasing to the eye, or more refreshing to the imagination, than the natural landscape scenes of a well-cultivated and well-peopled country. These have, in England, features that charm and instruct. Inequalities of country, not too abrupt; woods that present rich masses of shade; rivers that offer the contrast of their silver bosoms, gliding gently through vales of constant verdure, which are neither hurt by their rapidity, nor rendered marshy
by

by their sluggishness; inclosures, which mark the value and the culture of the soil; and scattered habitations of the poor, clean and comfortable, mixed with the houses of farmers, in a state of ease and prosperity; and with the seats of gentlemen, who find society and liberal pleasures, without deserting the fields which gives them their support, for the profusion and waste of a capital. No philosophical eye can view such a scene without pleasure, nor contemplate it without instruction. Such a scene is not to be met with in Catalonia; the latitude which spreads over their heads a clear expanse of blue, which lightens up in their heavens a blazing sun, with rays of which we have no feelings, which bids the perfumes of the east breathe over their wastes, and gives to their gardens a profusion of most delicious fruits, forbids it. Infinitely the greater part of the province is rock or mountain, without verdure, and without other wood, than ever-green oaks, olives, or pines; and no where, except in the Pyrenees, with any masses of shade that give effect to the prospect. The only verdure in the country, tolerably durable, is that of the vineyards. Great wastes are covered with shrubs, which, however beautiful, when detached, have very little effect in a general prospect. To look for neat cottages, or good farm-houses, is to look in vain; and to find the landlords of the country, you must go to Barcelona and Madrid. The deficiency of verdure, destroys half the idea of rural beauty; the eye, dazzled with the unvarying splendour of the solar beams, and tired with wandering over arid heaths, aches for cooler and more quiet scenes, and languishes to repose on the verdant mead. When watered, where alone there could be verdure, all is a crowded scene of trees, and corn and hemp; of glorious fertility, but forming the good feature of a landscape, only when looked down upon from an eminence immediately above it. Hence, I own, that in respect of beauty of prospect, I must prefer many parts of France, and more in England, infinitely to any thing I saw in Catalonia, a country whose most striking features are its rocks.

I take the climate to be equal to any thing that is known in the world; I was there in the hottest season of the year, and travelling twelve and fourteen hours a day, yet bore it without any such oppression as could give an idea of its ever being insupportable; and both men and women stood their field business through the day, except two hours, which they take for repose. Supposing, however, that July and August are esteemed much too hot, still the rest of the year must, from every circumstance we heard, be delicious—they spoke with rapture of the pleasantness of the month of May; and no doubt but the winter must be a charming season, where such vegetables as green pease are gathered through every month of it, from the open fields. In regard to wholesomeness for invalids, one circumstance should be considered, which may be applied

equally to all watered arable lands: I should conceive, that they must of necessity, in so hot a climate, be very unwholesome; and little better than rice-grounds, which are known every where to be pestiferous. The land is kept constantly watered, it is therefore little better than an earth sponge, or mass of mud; innumerable fibres of vegetables are mixed with it; the heat, the moisture, and the rich soil form a putrid fermentation, which gives health and luxuriance to vegetables, but must fill the air with phlogistic effluvia, I should apprehend far from wholesome to the human body. This is a consideration for physicians, and for those whom they send to southern climates.

IRRIGATION.

THE prospects down the vale of Aran beautiful; it is without fallows, fine hemp instead of them. Look down on the town of Esteredano, around which, culture rises pretty high up the mountains. All the corn cut, is reaped, and bound in sheaves—Walnuts. Descend into the vale—Figs. Watered meadows. Ray-grass predominates; much common clover, white clover, trefoil, vetches, &c. A causeway for irrigation across the vale; the meadows are uncut, and have $2\frac{1}{2}$ tons per acre, on an average; the corn all through, 3 quarters an acre. Pass a rich flat common; part of this vale fed by horses, mules, hogs, asses, and a few oxen.

Advancing—what meadows there are, are well watered; as are French beans, hemp, and a small quantity of lucern.

Leave Poeblar; they have lucern, but not good; the gardens are all watered; mulberries; prices of silk this year, 18 liv. the pound. Cultivation all around, among the olive trees; but it is corn one year, and fallow another. Cross the river, which is here sixty yards wide. Wheels for raising the water of it into the gardens, ten or twelve feet high; they are of a very simple construction; something like the common water-wheels of a mill, but made very light; the fellys of the wheel are hollow in divisions, taking the water in through holes at equal distances, and as the stream turns the wheel, it delivers the water out of the same holes at the top of its revolution, into a trough, which conducts it where wanted; it is cheap, simple, and effectual. Many peach-trees scattered about the gardens, &c. Mount the hills; pass
two

two large tracts, of above one hundred acres, destroyed by the torrents. Great quantity of pudding-stones. The mountains around are of interesting and bold features. The country in general here has a great mixture of cultivation and waste; it is for some space pleasing enough to the eye, but the produce is, I believe, very low; we saw many oats, and scarcely any that will produce more than a quarter an acre. They have no meadows; and I should observe, that our mules have not found such a thing as hay; straw and barley are their food; in all those spots which would give grass, corn and legumes are sown, as more necessary and more valuable; and this, I am told, is the case over all Spain, lucern excepted.

Near Monte Schia—they have here poor crops of flat barley: of water, they know well the value, a spring of any account being carefully conducted into a reservoir, and let out at seven in the morning and at night to water.

Advancing—there is some good hemp, watered; and I see enough of the country to find that water is all in all; where that is to be conducted, they get crops that pay well; but where no water, they have not the power or the knowledge to turn the soil, however good it may be, to a profitable account; fallow the only effort, and the success every where miserable.

Cross a fine stream with many acres under it, yet no watering; the reason I cannot tell, unless the land is common; if so, it is easily explained.

The soil stoney; the large, of the pudding class; but, in the midst of this arid wretched desert, come to a spring, which rises out of the earth into a small reservoir, and is immediately used for irrigation; maize, hemp, cabbages, beans, and all fine; the contrast shews the astonishing effect of water, and that in this climate, the soil is the least object—the sun and water do the whole.

Passing Paous; every thing changes the features; the vale, on comparison with those we have seen, is wide, and also flat, and water plentifully conducted in canals, which pass every quarter, so as to let into the field of every proprietor; having passed above one hundred miles of dreary mountain, this vale, so great was the contrast, had the appearance of enchantment; the care and attention given to irrigation, cannot be exceeded. The land is prepared for it, by levelling with a nicety as curious as for making a bowling-green, and this (conducting the water excepted, which is common to every one), is the only expence: this general level is divided into oblong beds, from six to eight feet wide, by little ridges of fine mould, drawn up nicely with a rake every time the ground is sown, in order that the water may not spread over too much at once, in which

case, the irrigation would be unequal; there would be too much of a current at the part where the water enters, a circumstance of no great importance in watering grass land, but which would be mischievous in arable; small trenches take the water from the carrier canals, and passing by the ends of those beds, the farmer opens them at pleasure, to distribute the water where wanted. As soon as the land is sown, it is watered, and periodically, till the plants are up; moderately while they are young; but every day, and sometimes twice a day, when full grown: the effect is surprising, and infinitely exceeds that of the very richest manures that can be spread upon any land. The rapidity of vegetation is so great, that there are but few crops, which demand all the summer for coming to perfection; I believe hemp is the only one; that plant is now five to seven feet in height, and of so thick a luxuriance, that nothing can be imagined finer. The rye stubbles are ploughed and sown with French beans, which are up and watered. After hemp, wheat is the crop.

Watered maize here, seven to nine feet high. Every time we see any irrigation, we are struck more and more with the importance of water, even on soils which are apparently mere rock, and on the most arid deserts, it gives at once the utmost luxuriance of vegetation. Vines and olives, however, stand in no need of it, but thrive admirably on the driest soils without it: not one acre, however, in twenty, is planted with them that might be.

Come to more watered grounds; gardening and husbandry mixed; peaches; apples; ripe pears; pomegranates in the hedges, as large now as walnuts in the shell; onions and lettuces in great plenty. Some watered lands have been sold at 1300 liv. the journal.

Near Martorelle is a fine irrigated valley; French beans, seven feet high. Good lucern, cut three or four times a year; onions, cabbages, and lettuces; but the hemp, every where a principal crop, not great. The land all formed into the beds for watering; which I have already described.

Exceeding fine hemp, watered. Maize thick, and in ear. Many fine and tall poplars by the river.

They are now (July) ploughing their stubbles for French beans. Their course is,

1. Hemp.
2. Wheat; and after wheat, French beans.

Three crops are therefore gained in two years. The products good. Very fine mulberries. A journal, which is here also about an English acre, of rich land in the vale, not watered, sells for 500 liv.: watered, for 1000 liv.

Leaving

Leaving Barcelona, enter immediately an extraordinary scene of watered cultivation, and which must have given the general reputation to the province. Nothing can well be finer. The crops in perpetual succession—and the attention given to their culture great. Not the idea of a fallow; but the moment one crop is off, some other immediately sown. A great deal of lucern, which is cut four, five, six, and even seven times in a year; all broadcast, and exceedingly thick and fine, from two and a half to three feet high, when cut. It is all watered every eight days. We meet many mule loads of it going into the town, each 450 lb. or $4\frac{1}{2}$ quintals, which sells for 4 *pesettos*, or near 4s. English; suppose it 4s. for 500 lb. it will not be difficult to calculate the produce of an acre. All I saw would yield 10 tons, green, per acre, at each cutting, and much of it a great deal more; let us suppose five cuttings, or 50 tons per acre, at 16s. a ton, this is 40l. sterling per acre. It is to be remembered, that the growth we saw, was the third, perhaps the fourth, and that the first and second are in all probability more considerable, it will not, therefore, be thought any exaggeration to calculate on five such. I by no means assert that lucern yields always, or generally so, as I speak only of what I see. I have very little doubt, however, but this is the amount of that portion, which is thus cut and sold to Barcelona; possibly one-third, certainly one-fourth, is to be deducted for the expence of carriage; this is the most difficult part of the calculation, for it depends on how many times the mule goes in a day, which must also depend on the readiness of sale, and other circumstances. The profit is, however, amazingly great. All the other lucern I have any where seen sinks, in my idea to nothing, on comparison with the vast and luxuriant burthens given by these watered grounds. The finest crops I have known in England, are drilled, but there is a fallacy to the eye in the drilled crops, in proportion to the distance of the rows; they appear thick while they are really thin, but in broadcast ones, which satisfy the eye, there is no deception; and these immense burthens, through which the scythe is with difficulty moved, produce more at one cutting, than two feet drills would at three, with the advantage of the herbage being finer and softer. But weeds in England and Catalonia are two very different things; it well deserves, however, with us, a better trial than it has yet generally received; I have viewed broadcast crops; particularly Rocque's, on a very rich garden soil; and Dr. Tanner's, on a common turnip loam, which, though not to be named with the Spanish, were certainly encouraging.

Hemp, through all these watered lands, is the predominant crop, it is seven feet high, and perfectly fine; some of it is already harvested. I am sorry to see that the watered part of the vale is not more than a mile broad. Indian fig,
called

called here, *figua de maura*, grows six or seven feet high, very branching and crooked, the arms at bottom as thick as the thigh of a common man; those and many aloes in the hedges. Every garden or farm has a small house, with a reservoir for water, which is filled in most by a water wheel, with jars around the circumference. The gardens between Barcelona and the fort, and also within the walls, are watered in the same manner; the water is let into every little bed, in the same way as I have already described. They are crowded with crops, and kept in most beautiful order; those in and close to the town, scattered with mulberry-trees. But in the district of which I am speaking at present, among the hemp and lucern, neither vine, olive, nor mulberry. These watered lands belong generally to proprietors who live in Barcelona, and are let at 30 to 40 Spanish livres the journal.

The valley, in its widest part, is three miles broad. Here it lets at 34 Spanish livres a year the journal, and sells from 600 liv. to 1000 liv.; each of these livres being about 54*s*.: (1000 Spanish livres makes 2700 French ones). Taking the medium, or 800 liv. and the French livre at 10½*d*. this makes the price of a journal 90*l*. 2*s*. 6*d*.; and the rent of it 4*l*. The gross rent of the land, therefore, pays nearly 4½ per cent.; but whether this is clear rent, the tenant paying all taxes, and doing the small repairs of his house, &c. or whether there are deductions on these accounts, are questions which were neither forgotten nor resolved. To shew the quick succession of their crops, they have corn in stacks on the borders of some of the fields, and the land ploughed and sown with millet, which is already nine inches high. Many bleaching grounds.

Advancing—the irrigated land lets from 24 to 40 Spanish livres: that not irrigated, at 15 liv. Water, therefore, here more than doubles the rent of the land; and in other places, we have found the difference yet greater. The soil all the way a red and brown deep friable loam, with a sufficient adhesion for any crops. They sow French beans after hemp, and then sow wheat.

At Ballalo, two hours from Barcelona, we meet with the first vineyards, but the hills here come down to the sea; and where they do not, the vale is not more than half a mile wide. *Lycium* in the hedges; some few mulberry-trees. Oranges in the gardens; a few palm-trees, with vines around them.

A journal of watered hemp, produces from 10 to 12 quintals; if not watered, the product much inferior; the price, 14 to 17 Spanish livres the quintal, or 35*s*. English, which makes 19*l*. 5*s*. an acre. This is, however, to be understood of a very fine acre. The mountains are at half a mile distant, and partly

partly cultivated to the top. All the way inclosed, and the men mending gaps in their hedges.

Every scrap of flat land well watered, from wells and reservoirs; the hill covered with vines.

Land, near Canet, well watered, sells for 500 Spanish livres the journal; vineyards for 300 liv. They give, in good years, to 12 charges. Unwatered land, 100 to 150 liv.

Enter a flat vale, half a mile broad, not watered. Hemp, very poor; maiz, seven feet high. Vineyards, under regular plantations of olives; corn cut, in stooks, and the land ploughed. A journal sells for 200 liv. and further on, where irrigated, for 1000 liv. which is an astonishing difference.

While the mountains and waste parts of the province present an unfavourable prospect, the watered districts are, on the contrary, scenes of most exuberant fertility. To a person, from the north of Europe, there can hardly be a more striking spectacle than the effect of watering in these southern climates; it converts an arid stoney waste, which would yield nothing but vines and olives, and on which every sort of grain would hardly return the seed, at once into fields, pregnant with the richest harvests; on such soils, it gives almost the whole value of the land; and on the richest, it raises it, at the least, double; and, in some instances, five times. It enables the cultivator to have a succession of crops, more important than any thing we know in the north. The reaping one crop is but the signal for immediately putting in another; in doing which, they exert themselves with the utmost activity; ploughing universally as soon as the corn is cut; and are, by this means, enabled to have constantly two crops a year. The extreme fertility of these lands has, however, led many travellers into great or ignorant exaggerations; they have asserted, that the land yields many crops at the same time, one under another, which is both true and false. It is fact, that corn, wine, oil, and silk, are produced by the same field, in some few instances; but it is not from hence to be concluded, that the goodness of the land, or the importance of irrigation, is at all shewn by that circumstance. The fact is, that it is impossible to raise one crop under another, without losing in one nearly as much as you gain in the other; the olive, being a large tree, cultivation may be carried on under it, but the crop gained is poor, and shews, that exactly in proportion to the shade is the injury sustained by the produce which is shaded. If the trees are thick, the corn is hardly worth reaping; it is the same in other cases, and I was well convinced, from viewing their grounds with this design, that the soil can
carry,

carry, profitably, but one crop at a time; several may be crowded on it, but nothing is gained; with grass under trees, this is not the case so much in a hot climate; but even grass is damaged, and it is not the question, at present, as they have none. A country to be supported, and in a hot climate, without meadows or pastures, sounds very strange to English ears, and it is among the curious circumstances of this part, and I am told of the rest of Spain. If they applied to grass the land that is proper for it, they could not possibly have bread to eat; straw here is given instead of hay, and entirely supplies its place, and the oxen and mules, which we saw, did not shew in the least, by their looks, any deficiency in nourishment. Lucern is not at all common through the interior part of the province, and where they cultivate it, it is used green. Maiz is sometimes sown merely for its herbage, as it might be, I believe, profitably in England, late in the spring, to avoid our frosts; it is one of the most nourishing plants in the world.

The consequence of water being so apparent in the province, I could not but attend particularly to their exertions in conducting it, and I concluded, that not one acre in twenty, perhaps in forty, is watered, that might be. In the flat vales, where canals of irrigation are made, at a small expence, a very good, though by no means a complete, use is made of them; but on the declivities of the mountains, it is necessary to erect a mound of solid masonry across the river, and to cut the canal partly out of rocks, and to support it by walls of stone, as I have seen in France; and having thus diverted a large portion of the water of a river, to carry it on its level, along the side of the mountain as far as it will go; such exertions demand a much greater capital, than is to be found upon the lands of Catalonia: it could be done only by a great lord, who knew the importance of such undertakings, who resided on his estate, and whose income was spent in something else than the taste and pleasures of a capital. But leaving such exertions to individuals, who either have not the money, or not the will to employ it, is to perpetuate wastes. It is the King only who can make those efforts; a monarch, who should be determined to improve his kingdom, would presently find the means of doing it. The importance of water is so well known, that if a canal is made to conduct it, the proprietors, or farmers of the lands below, would readily and speedily make use of it, paying proportionably for the quantity they took; this is the system in Lombardy, and the effect is great. It would be the same in Catalonia, but the capital, for the great work of the canal, must probably be supplied by the king, if not the whole, at least a considerable portion. Such money should be lent to undertakers, at a moderate interest. Exertions of such a nature, with a proper general attention given to these objects, would make them

them fashionable among the great lords of the kingdom, and fertile provinces would soon be created out of barren and desolate wastes. Arbitrary power has been exerted for ages, in efforts of barbarity, ignorance, and tyranny; it is time to see it employed in works, that have the good of mankind for their aim. A beginning, and a very good one, is made in the construction of some great roads, on a scale of true magnificence, which is never exhibited with such effect, as in works of public utility; and whenever the importance of cultivation is well understood in Spain, and the right means of advancing it clearly analyzed, irrigation will then receive an attention that has not, hitherto, been given. Such is the necessity of water, for various productions in this climate, that rivers ought to be no more than infinitely multiplied channels, and collected in one stream only, as a reservoir for fresh, and repeated deviations.

S H E E P.

ON the northern ridge of the Pyrenees, bearing to the west of Bagnere de Luchon, are the pastures of the Spanish flocks. This ridge is not, however, the whole; there are two other mountains, in a different situation, and the sheep travel from one to another as the pasturage is short or plentiful. I examined the soil of these mountain pastures, and found it in general stoney; what in the west of England would be called a *stone brash*, with some mixture of loam, and in a few places a little peaty. The plants are many of them untouched by the sheep: many ferns, narcissus, violets, &c.; but burnet (*poterium sanguisorba*), and the narrow-leaved plantain (*plantago lanceolata*), were eaten as may be supposed, close. I looked for trefoils, but found scarcely any: it was very apparent, that soil and peculiarity of herbage had little to do in rendering these heights proper for sheep. In the northern parts of Europe, the tops of mountains half the height of these, for we were above snow in July, are bogs; all are so, which I have seen in our islands, or at least, the proportion of dry land is very trifling to that which is extremely wet: here they are in general very dry; now a great range of dry land, let the plants be what they may, will in every country suit sheep. The flock is brought every night to one spot, which is situated at the end of a valley on a river, and near the port or passage of Picada: it is a level spot sheltered from all winds. The soil is eight or nine inches deep of old dung; not at all inclosed, and, from the freedom from wood all around it, seems to be chosen partly for safety against wolves and bears. Near it is a very

large stone, or rather rock, fallen from the mountain. This the shepherds have taken for a shelter, and have built a hut against it; their beds are sheep-skins, and their doors so small that they crawl in. I saw no place for fire; but they have it, since they dress here the flesh of their sheep; and in the night sometimes keep off the bears, by whirling fire-brands: four of them belonging to the flock mentioned above, lie here. Viewed the sheep very carefully, and by means of our guide and interpreter, made some inquiries of the shepherds, which they answered readily, and very civilly.

A Spaniard, at Venasque, a city in the Pyrenees, gives 600 liv. French, (the livre is 10½d. English), a year, for the pasturage of this flock of two thousand sheep: in the winter he sends them into the lower parts of Catalonia, a journey of twelve or thirteen days; and when the snow is melted enough in the spring, they are conducted back again. They are the whole year kept in motion, and moving from spot to spot, which is owing to the great range they every where have of pasture. They are always in the open air, never housed, or under cover, and never taste of any food, but what they can find on the hills.

Four shepherds, and from four to six large Spanish dogs, have the care of this flock; the latter are in France called of the Pyrenees breed; they are black and white, of the size of a large wolf; a large head and neck; armed with collars stuck with iron spikes; no wolf can stand against them; but bears are more potent adversaries; if a bear can reach a tree, he is safe, he rises on his hind legs, with his back to the tree, and sets the dogs at defiance. In the night, the shepherds rely entirely on their dogs; but on hearing them bark, are ready with fire-arms, as the dogs rarely bark if a bear is not at hand. I was surprised to find that they are fed only with bread and milk. The head shepherd is paid 120 liv. a year wages, and bread; the others, 80 liv. and bread. But they are allowed to keep goats, of which they have many, which they milk every day; their food is milk and bread, except the flesh of such sheep or lambs as accidents give them. The head shepherd keeps on the mountain top, or an elevated spot, from whence he can the better see around, while the flock traverses the declivities. In doing this, the sheep are exposed to great danger in places that are stoney; for by walking among the rocks, and especially the goats, they move the stones, which, rolling down the hills, acquire an accelerated force enough to knock a man down, and sheep are often killed by them. Examine the sheep attentively. They are in general polled, but some have horns; which in the rams turn backwards behind the ears, and project half a circle forward; the ewes horns turn also behind the ears, but do not project; the legs white or reddish; speckled faces, some white, some reddish; they would weigh fat, I reckon, on an average, from 15 lb. to 18 lb. a quarter.

quarter. Some tails left long. A few black sheep among them; some with a very little tuft of wool on their foreheads. On the whole, they resemble those on the South Downs; their legs are as short as those of that breed; a point which merits observation, as they travel so much and so well. Their shape is very good; round ribs, and flat straight backs; and would with us be reckoned handsome sheep; all in good order and flesh. In order to be still better acquainted with them, I desired one of the shepherds to catch a ram for me to feel, and examine the wool, which I found very thick and good of the carding sort, as may be supposed. I took a specimen of it, and also of a hoggit, or lamb of last year. In regard to the mellow softness under the skin, which is a strong indication of a good breed, with a disposition to fatten, he had it in a much superior degree to many of our English breeds, to the full as much so as the South Downs, which are, for that point, the best short-woolled breed which I know in England; the fleece was on his back, and weighed, as I guessed, about 8 lb. English; but the average, they say, of the flock, is from 4 lb. to 5 lb. as I calculated by reducing the Catalonian pound of 12 oz. to ours of 16 oz.; and is all sold to the French, at 30*s.* per lb. French. This ram had the wool of the back part of the neck tied close, and the upper tuft tied a second knot, by way of ornament; nor do they ever shear this part of the fleece for that reason; we saw several in the flock with this species of decoration. They said that this ram would sell in Catalonia for 20 *liv.* A circumstance which cannot be too much commended, and deserves universal imitation, is the extreme docility they accustom them to; when I desired the shepherd to catch one of his rams, I supposed he would do it with his crook; or probably not be able to do it at all; but he walked into the flock, and singling out a ram and a goat, bid them follow him, which they did immediately, and he talked to them while they were obeying him, holding out his hand as if to give them something. By this method, he brought me the ram, which I caught, and held without difficulty.

The mountain pastures belonging to the Spaniards, not used by themselves, they let to the owners of large flocks, who bring them from the lower part of Catalonia, as with the French mountains; these flocks rise to 4000 sheep; the rent, in general, being from 5*s.* to 7*s.* a head, for the summer food. Every inhabitant possesses cattle, which he keeps in the common mountains in what quantity he pleases; but others, who do not belong to the parish, pay 5*s.* to 7*s.* a head for the sheep, and 10*s.* for a cow; which disproportion they explain, by saying, that sheep must have a much greater range.

They have good sheep in various parts of Catalonia, but all are sent to Saragosa or Barcelona.

The mountains and wastes in some parts have no sheep; only goats.

Cross great wastes, which in other countries would be sheep-walks; but none here; for five-sixths of the spontaneous growth are aromatic plants.

See two small flocks of sheep, exactly like those in the Pyrenees, described the first day of this journey.

A small flock of sheep, that give 5 lb. or 6 lb. of wool each.

Several small sheep-folds.—Such notes as these, shew how few they are, on comparison of what they ought to be.

In travelling over the lower mountains, after quitting the higher Pyrenees*, the deficiency of sheep struck me very much; the climate is too dry to think of a luxuriant vegetation of grass; but if the rosemary, lavender, and other aromatic useless plants were destroyed, and the land, by cultivation, properly adapted, was to be laid down to such plants as would feed sheep, fine pastures might not be gained, but much valuable sheep-walk would be created, and the quantity of wool increased an hundred fold. Such a system would unite well with olives, which might be thinly scattered over such improvements. To import immense quantities of sheep from France, and to take no steps to increase them at home, is a blind conduct, especially when it is considered, that in a proper system, they cannot be increased, without being at the same time, the means of improving fresh land.

Produce of the Kingdom of Valencia in 1787.

	<i>Reals de Vellon.</i>	<i>English Money.</i>		
		£.	s.	d.
Silk, 2,000,000 lb. at 60 <i>reals</i> , - -	120,000,000 -	2,000,000	0	0
Hemp, 25,000 <i>quintals</i> , at 160 <i>reals</i> , -	4,000,000 -	66,666	13	4
Flax, 30,000 <i>quintals</i> , at 200 <i>reals</i> , -	6,000,000 -	100,000	0	0
Wool, 23,000 <i>quintals</i> , at 160 <i>reals</i> , -	3,680,000 -	61,333	6	8
Rice, 140,000 <i>cargas</i> , at 150 <i>reals</i> , -	21,000,000 -	350,000	0	0
Oil, 10,000 <i>quintals</i> , at 180 <i>reals</i> , -	1,800,000 -	30,000	0	0
Wine, 3,000,000 <i>arrobas</i> , - -	84,000 000 -	1,400,000	0	0
Dry raisins, 60,000 <i>quintals</i> , at 40 <i>reals</i> , -	2,400,000 -	40,000	0	0
Figs, 60,000 <i>quintals</i> , at 32 <i>reals</i> , -	1,920,000 -	32,000	0	0
Dates and palms, - - -	1,200,000 -	20,000	0	0
		£.	4,100,000	0 0

* There is no line of boundary to be fixed, with any precision, to the Pyrenees; I am inclined to think, that all the mountains we saw, Montserrat perhaps excepted, are branches of that stupendous chain, uniting in some direction. The whole mountainous part of the province, that is, eighteen-twentieths of it, is properly the Pyrenees.

Prices at Madrid, 1788.

	<i>Average.</i>	<i>Eng. Money.</i>	
		<i>s.</i>	<i>d.</i>
Beef, 14 to 15 <i>quartos</i> per lb.	15 <i>quartos.</i>	0	3½
Veal, 24 to 30 <i>quartos</i> per lb.	27	0	6½
Mutton, 15 <i>quartos</i> per lb.	15	0	3½
Fresh pork, 15, 17, to 20 <i>quartos</i> per lb.	17	0	4½
Salted pork, 17 to 20 <i>quartos</i> per lb.	17	0	4½
Ham, 18 to 22 <i>quartos</i> per lb.	20	0	5
Tallow candles, 15 <i>quartos</i> per lb.	15	0	3½
Soap, 16 <i>quartos</i> per lb.	16	0	4
Butter (<i>Mantica de Flandes</i>), 8 <i>reals</i> per lb.	8 <i>reals.</i>	2	8
Goat's milk, 6 to 7 <i>quartos</i> per <i>el quarto</i> ,	7 <i>quartos.</i>	0	1½
Mancha cheese, 18 <i>quartos</i> per lb.	18	0	4½
Turkey, 12, 20, to 45 <i>reals</i> a piece,	25 <i>reals.</i>	8	4
Fowl, 8, 11, to 14 <i>reals</i> a piece,	11	3	8
Hare, 5 to 9 <i>reals</i> a piece,	7	2	8
Rabbit, 5 to 8 <i>reals</i> a piece,	6	2	0
Partridge, 4 to 8 <i>reals</i> a piece,	6	2	0
Pigeons, 5 to 6 <i>reals</i> a piece,	5	1	8
Eggs, 21 to 42 <i>quartos</i> a dozen,	31 <i>quartos.</i>	0	7½
Potatoes, 4 to 6 <i>quartos</i> per lb.	5	0	1½
Garvanços (large pease), 10 to 12 <i>quartos</i> per lb.	11	0	2½
Wheat flour, 13 <i>quartos</i> per lb.	13	0	3½
Rice, 11 to 12 <i>quartos</i> per lb.	11	0	2½
Brandy, 2 <i>reals</i> per <i>el quarto</i> ,	—	0	8
Common wine, 26 to 28 <i>r.</i> the <i>arroba</i> (about 18 bottles), 27 <i>reals.</i>	—	9	0
Valdefunas wine, 36 <i>reals</i> per <i>el quarto</i> ,	—	12	0
Charcoal, 4 <i>reals</i> and 5 <i>quartos</i> the <i>arroba</i> ,	—	1	5½
Wood, 3 <i>reals</i> the <i>arroba</i> ,	—	1	0
Common bread, 6 <i>quartos</i> per lb.	—	0	1½
Pan candial, 6 <i>quartos</i> per lb.	—	0	1½
Common oil, 15 <i>quartos</i> per lb.	—	0	3½
Valencia oil, 4 <i>reals</i> per lb.	—	1	4
French oil, 7 <i>reals</i> per lb.	—	2	4
Coffee, 34 <i>quartos</i> per lb.	—	0	8½
Sugar, 30 to 38 <i>reals</i> per lb.	34 <i>reals.</i>	11	4
Chocolate, 6, 8, to 10 <i>reals</i> per lb.	8	2	8
Tea, 11 <i>quartos</i> per oz.	—	0	2½
Hair-powder, 2 <i>reals</i> per lb.	—	0	8

MAJORCA.

M A J O R C A.

SOME circumstances relating to this island, which I procured from good authority at Barcelona, and at Bayonne, from Spaniards who had resided many years in it, I think too interesting to be omitted, as they may serve, if for no other purpose, at least, to point the inquiries of some future traveller, who shall have an opportunity of visiting that island.

Climate.

The most delicious that has been experienced by various persons well acquainted with France, Italy, Spain, and Portugal; and resulting in a good measure from the variety of the face of the country, which rises from some beautiful plains to gentle slopes, which, after many undulations of surface, finish in the mountains. In the greatest heats of July and August, the hills preserve the temperature almost vernal: nor are the heats ever suffocating in any part. The winters, except on the highest parts of the mountains, are mild and pleasant, as may be gathered from circumstances of vegetation, almonds blossom in December, are in full bloom in January; and many wild flowers are in all their beauty quite through the year. Spinnage, green pease, beans, lettuce, endive, cellery, &c. are in perfection the year round. In the depth of winter, ice is seen to the thickness of one-tenth of an inch, but melts before the day is much advanced. No sharp cutting winds are ever felt, either in winter or in spring; and a person who resided there sixteen years, never saw a fog. The houses have no chimnies; but when artificial warmth is wanted, almond-shells are burnt in *brasieres*. This extremely agreeable temperature of the climate, was confirmed to me by General Murray and his Lady, who resided there many years; and the former mentioned a circumstance, which shews how erroneous it would be to judge of any climate by the latitude; Leghorn is nearly in the same parallel, but the severest cold he ever felt, in March, was at that place, where, in washing, the water became ice before a towel could be well dipped in it.

Culture and Products.

The hills are formed into terraces, and planted and cultivated with great attention. Olives are planted, and under them wheat sown; in the flats, many almonds and mulberries. Oranges and lemons are in such quantities, that they export many to France. They are in great profusion, and the most beautiful

to

to be imagined. The mountains of Soleya are famous for peaches, and all sorts of fruit. Hedges of pomegranates are attended with medlar and quince trees, alternately on one side, and on the other mulberries; but the best fence is the prickly pear, the fruit of which is ripe in July, which is eaten, both leaf and fruit, by cattle, and are supported on it in fine order, when other things fail in the heat. Musk and water melons are in great perfection.

Sugar-canes do well; but no such thing as rice, as neither swamp, marsh, nor bog.

Irrigation is well understood, and much practised.

A common course of crops,

1. Wheat.
2. Barley.
3. Beans.
4. Pease.

Capers (which are a weed), come up in the wheat stubbles, which give a crop; then the stubble and caper-bushes are burnt, and the barley and legumes succeed, and after those artichokes.

They plough with a pair of oxen, or mules.

The proprietors in general keep the land in their own hands.

Living.

This island, which, by every account, might be made a paradise, is one of the cheapest spots in Europe to live in; upon an income of 150l. a year sterling, men of the better sort live very comfortably, and bring up a family. Every vegetable production for the table, with all kinds of fruits, are not only in uncommon profusion, but excellent of their sorts. Poultry no where better; turkies are kept in great droves, and driven to feed on berries, as regularly as sheep to pasture; they are fattened on myrtle-berries, and are not only of a delicious flavour, but a great size, even to 36 lb. weight. Mutton is excellent; some sheep are so small from the island of Yuvica, that three legs are sometimes served up in one dish.

All these circumstances united, seem to point out this island as an excellent winter residence for those who can no longer resort to Nice or Hyeres, and is probably a better climate than either of them.

Produce

Produce of the Island of Majorca in 1786.

			Pesos.	English Money,		
				£.	s.	d.
Wheat,	475,336 <i>fanegas</i>	-	1,521,075	-	342,241	17 6
Barley,	152,880	-	300,664	-	67,649	8 0
Oats,	122,068	-	134,274	-	30,211	13 0
Pulse,	102,037	-	244,888	-	55,099	16 0
Almonds,	60,500	-	129,066	-	29,039	17 0
Oil,	193,030 <i>arrobas</i>	-	476,140	-	107,131	10 0
Wine,	1,665,660	-	322,829	-	72,636	10 6
Hemp,	24,446	-	83,180	-	18,715	10 0
Flax,	5,038	-	15,367	-	3,457	11 6
Carobs,	500,000	-	83,333	-	18,749	18 6
Figs,	175,000	-	62,000	-	13,950	0 0
Cheese,	-	-	25,000	-	56,250	0 0
Wool, 472,795 lb.	-	-	61,341	-	13,801	14 6
Straw of wheat and barley,	-	-	125,045	-	28,135	2 6
Silk, 5,347 lb.	-	-	24,061	-	5,413	14 6
Sweet oranges,	-	-	45,000	-	10,125	0 0
Fruits of all sorts,	-	-	170,000	-	33,250	0 0
Pimienta,	-	-	13,000	-	2,925	0 0
Capers,	-	-	4,500	-	1,012	10 0
Increase of sheep, by birth,	-	-	126,942	-	28,561	19 0
— of goats,	-	-	31,430	-	7,071	15 0
— of black cattle,	-	-	25,704	-	5,783	8 0
— of hogs,	-	-	240,000	-	54,000	0 0
— of horses, mules, and asses,	-	-	74,100	-	16,672	10 0

Many articles are not mentioned in this account, and are reckoned to amount (the specified produce comprised) to

4,983,326 - 1,121,248 7 0

The extent of Majorca is $123\frac{1}{2}$ square leagues, whereof twenty to one degree.

Majorca is reckoned to be the $\frac{1}{178}$ part of the continent of Spain; and the whole of Spain does not amount to 250,000,000 *pesos* per annum, according to the opinion of many well-informed Spaniards.

Majorca.
316,011 3 0
Spain.
55,933,988 17 0

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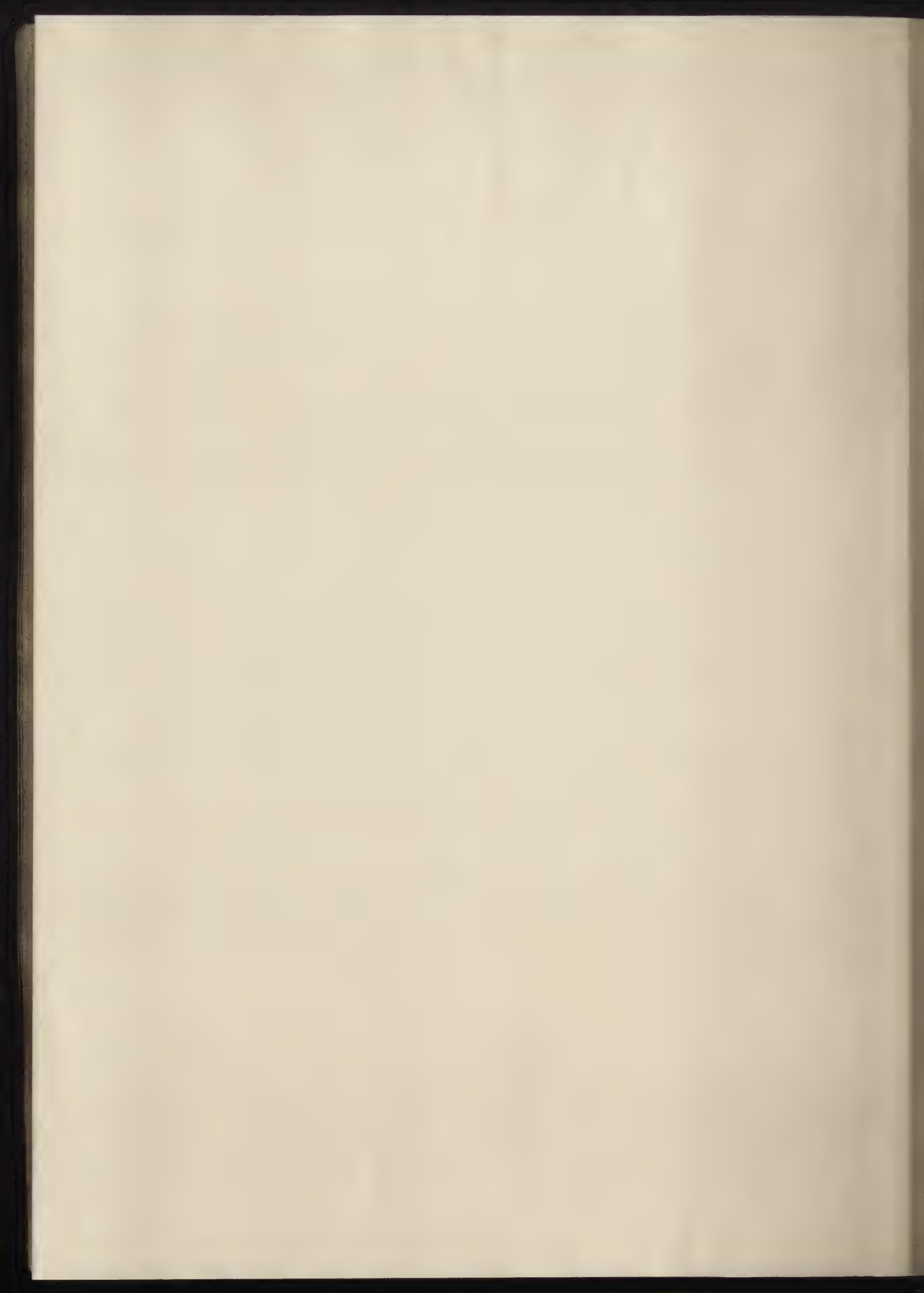
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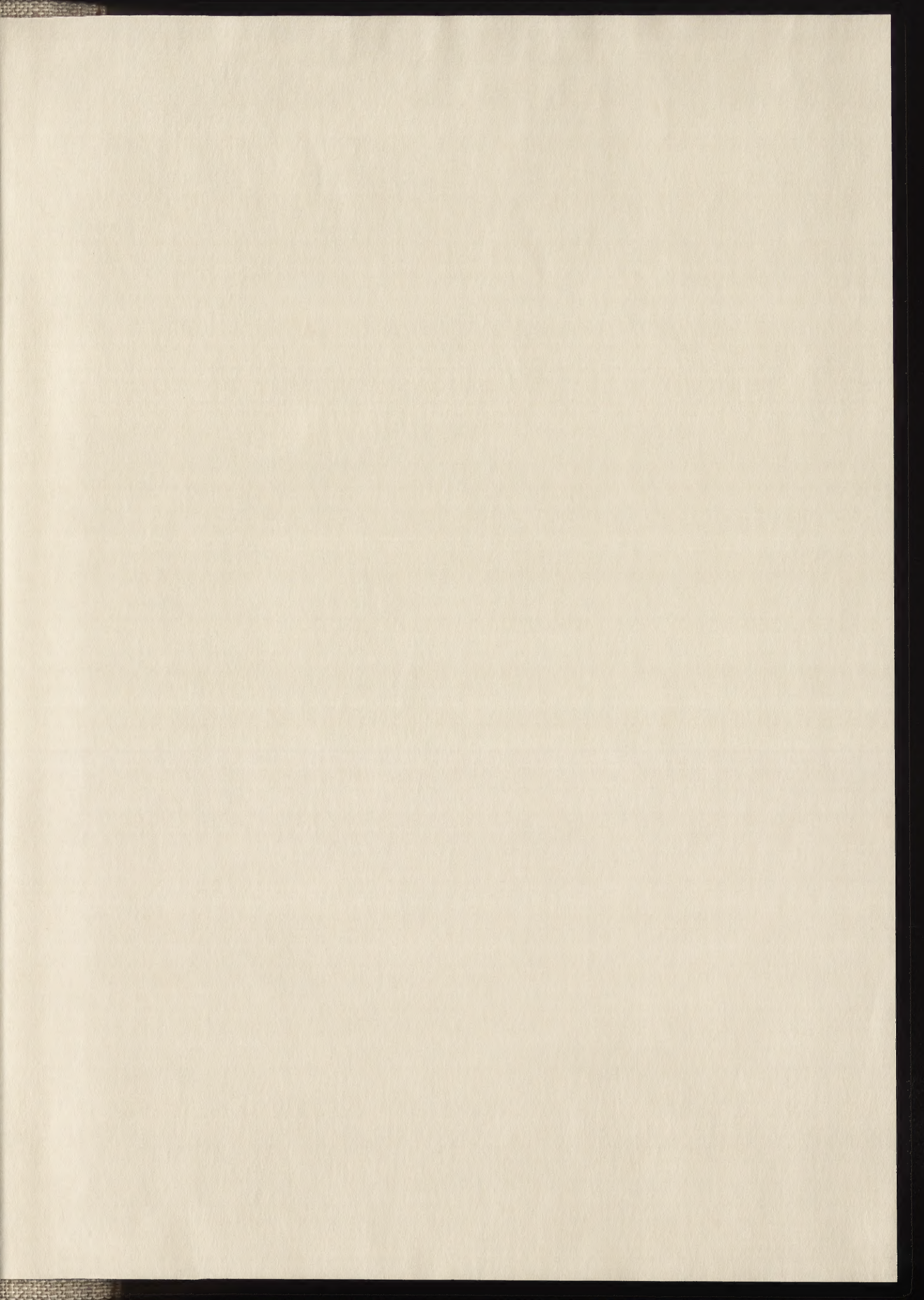
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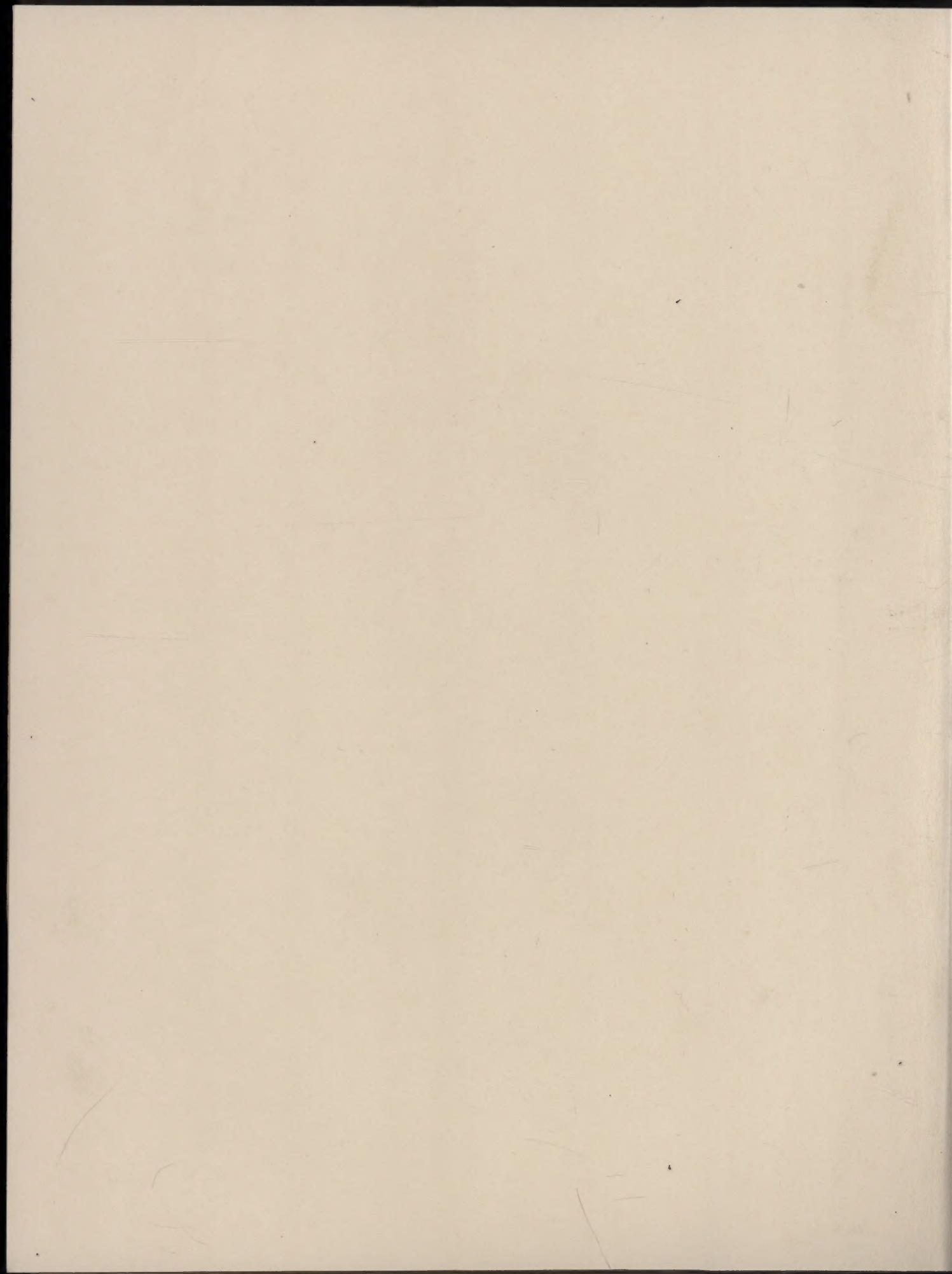
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